Sunlight Supply, Inc.
National Garden Wholesale®

2010 Product Catalog

Specializing in the wholesale of indoor horticulture, organics & hydrogardening supplies.

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15th Anniversary
1995-2010

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Sunlight Supply® Inc.
National Garden Wholesale®

Who are we?

FOUNDED IN 1995, Sunlight Supply/National Garden Wholesale is a family-owned business headquartered in Washington state. We are a wholesale only company specializing in the wholesale of indoor horticulture, organics and hydrogardening supplies.

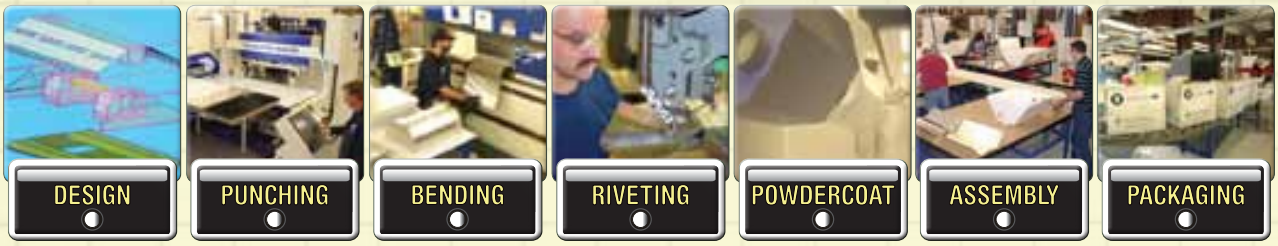
We have over 300 employees and operate 8 facilities in 5 states. Our products are offered to gardening enthusiasts nationwide through a network of independent retail garden stores and internet-based retail sites. We are a leading supplier to many fine indoor gardening retail stores.

We are manufacturers

We are the industry's only vertically integrated manufacturer with complete sheet metal fabrication capabilities. We market our horticultural lighting fixtures under our Sun System umbrella name. Our specialty is horticultural lighting.

Sheet Metal, Fabrication and Powder Coating—Woodland, WA

Lighting and Environmental Control Assembly—Vancouver, WA



We are importers

Much of todays indoor gardening equipment is manufactured outside the U.S.A. In order to make these products available at your favorite local gardening store—our sourcing department searches worldwide to deliver our current product mix which is now sourced from 12 countries.

We are distributors

Our complete product offering encompasses all product categories necessary to stock an indoor horticulture store. Our product selection is the largest and most complete in the industry. We offer over 3,000 different specialty gardening products.

Quality products and professional service.
BEST SELECTION
Customer satisfaction is our #1 Priority

National brand name products— some of these brands include:

Eye Lighting
Ushio
Solarmax
Grodan
General Hydroponics
Botanicare
Foxfarm
HydroDynamics
Dutchmaster
Roots Organics
Technaflora
Grotek
Humboldt Nutrients
B'Cuzz/Atami
American Hydroponics
Black Gold/Sunshine
Can Fans & Filters
Atmosphere/Vortex
Sentinel Controllers
Green Air Products

We distribute many exclusive & co-exclusive products including:

Adjust-a-Wing Reflectors
Fresca Sol Water Cooled Lights
BioAg
Vermicrop
Bloombastic
Grow Lab
Natures Nectar
Easy Grow Lightite Films
Aerogarden
Plant Marvel
Everest Nation
Feliz Compact Fluorescent Lamps
Royal Gold Growing Media
No Holes Bar Light Stand
Zenport Hand Tools
Botaniwipe
Flower Dragon
Geohumus

We exclusively distribute many proprietary brands:

Sun System Lighting Fixtures
Galaxy Electronic Ballasts
Master Blaster Electronic Ballasts
Phresh Filters
Carbonaire Filters
Titan Controls
Eco-Plus Fans, Pumps & Timers
Flame Defender Automatic Fire Extinguishers
Ultra Sun Lamps
Sun Hut - Indoor Greenhouses
Spectralux Lamps
Mother Earth Perlite
Sure Shot & Big Shot Measuring Glasses
Premium Nursery Pots, Net Pots & Bucket Lids
Aqua Heat Reservoir Heaters
Super Sprouter Seedling Heat Mats & Thermostat
Sunlift Light Hangers
ProGrip Light & Equipment Hangers
Sun Blocker - Insulating Films
Sun Film - Reflective Films
Chrome Dome Reflector Lamps

We are a warehousing and logistics company

We inventory our products in 7 strategic locations. The majority of our orders ship within 24 hours to retail stores who choose to buy from us. We can drop ship on behalf of a retail store from any location. Our national presence reduces shipping times and freight expense. Multiple locations means redundant inventory. Outages at one location can often be filled by an alternate distribution center.

Northwest—Vancouver, WA

Northern California—Samoa, CA

Central California—Livermore, CA

Southern California—Ontario, CA

East—Nashville, TN

Northeast—York, PA

Southeast—Pompano Beach, FL

Sunlight Supply, Inc.
National Garden Wholesale

Specializing in the wholesale of indoor horticulture, organics and hydrogardening supplies

www.sunlightsupply.com www.n-g-w.com

Hydro 101: An 8-step guide to successful indoor gardening

1) The right environment

Having the right environment is critical for your garden. Key elements to a successful garden room include relative humidity, temperature, CO_2 (Carbon Dioxide) and air circulation/exchange. The ideal humidity for a garden room falls between 40 & 60 percent. Some plants like higher humidity, but know that higher humidity can lead to problems with fungus and disease. Temperatures in your grow room should be between 68 – 75 F degrees. Temperature changes will lead to variations in humidity levels. Avoid drastic temperature changes over a short period of time. Your plants need CO_2 to grow. Assuming you have good air circulation/exchange, your garden room will naturally have between 300-400 PPM (parts per million) of CO_2; higher CO_2 levels should accelerate growth rates. If you choose not to supplement CO_2 in your garden room, it is important to address the air circulation/exchange so that your plants will receive fresh CO_2.

2) Start off with good water

The water you use for your plants will determine how well your plants will grow, regardless of what you add in terms of nutrients and supplements. PPM (parts per million) or EC (electrical conductivity) are the measurement of the salts in a solution. Neither PPM nor EC readings will tell you what is in your solution / water, but rather are indicators of the solutions ability to conduct electricity. Ideally, you want to start off with a low PPM or EC then you can add nutrients specific to your plants requirements. You can reduce the PPM of your water using a Reverse Osmosis (R.O.) unit then build your nutrient solution around what your plants need. pH (potential hydrogen) measures the acidity or alkalinity of your solution on a scale of 0 – 14. A solution is considered acidic below 7 and basic at 7 or higher. When working with hydroponics you typically want your pH to fall between 5.8 and 6.2. When growing in soil or coco you want your pH between 6.0 and 6.8. The most important rule to remember with pH is to avoid extremes. Nutrient "lockout" occurs with high and low pH levels.

3) Choose a method

Ebb & Flow gardens flood and drain a tray of plants with a nutrient solution at regular intervals. A drip garden provides nutrient solution to the plant through tubes & emitters (drip stakes) to each plant. Aeroponic growing mists an oxygenated nutrient solution directly to the roots of a plant. NFT (Nutrient Film Technique) gardens create a slow moving nutrient solution -'film'- that flows over the roots of the plants. Organics have become a preferred method of growing. Choose the size container you want, an organic soil/medium, an organic fertilizer and water by hand.

4) Choose a medium

Growing mediums act as the anchor for the plants root system. Some add nutritional value to your plants while others simply give the roots something to hold on to. Some mediums to consider are soil, soil-less mixes, coco, hydroton, rockwool/stonewool, or silica stone. Coco is available in both a loose and compressed form. Coco is made from the husks of a coconut, and it is very pH stable and provides good moisture retention and natural aeration qualities. Hydroton or clay pebbles are made from expanded, pH neutral clay. They tend to hold water well and have great oxygen to water ratio; this makes hydroton suitable for hydroponic and soil gardens. With proper sterilization techniques, hydroton can be reused. Rockwool is made from stone that is heated then spun into fibers. It is then compressed into starter cubes, grow blocks, or slabs. This medium has excellent oxygen to water ratio. Rockwool tends to have a higher pH, so flushing with 5.5-5.8 pH balanced water or a rockwool conditioning solution is recommended. Rockwool works best in an ebb & flow and drip systems. Silica stone is a rock that contains high levels of silicate which helps slow transpiration rates of plants. This is especially helpful in garden rooms that have temperatures above 85 F degrees. Silica stone is pH neutral and environmentally friendly. Like hydroton, silica stone can be reused and is suitable for hydroponic and soil gardens.

5) Nutrients

Like humans, plants require food (nutrients) to grow. Nutrients come in organic and synthetic varieties and are available in both liquid and dry form. Nutrients can be separated into two categories, macro and micro nutrients. The macronutrients are nitrogen, phosphorus, potassium, calcium, magnesium and sulfur. The micronutrients or trace nutrients include iron, manganese, boron, zinc, copper, molybdenum and chlorine. If the nutrients are deficient or are abundant you may see burning, curling or yellowing. You do not want to over or under fertilize. There are many different types of nutrients/fertilizers available on the market. You can purchase organic, synthetic (chemical) or a combination of both. Most nutrients/fertilizers will have an N-P-K (Nitrogen, Phosphorus, and Potassium) on the front of the bottle. In the vegetative or growth stage the "N" will typically be higher. In the flowering or bloom stage the "P" will typically be higher. You may also consider implementing additives/supplements into your nutrient mix. Additives/supplements can bolster microbial activity at the root zone, increase size, flavor and aroma. When used together, nutrients and supplements will help you achieve maximum results.

6) Lighting

High Intensity Discharge (HID) is the preferred lighting in a garden room. The two types of HID lighting commonly used are HPS (High Pressure Sodium) and MH (Metal Halide). HPS lamps deliver more of an orange/red spectrum, which is ideal for most plants in the flowering/bloom stage. MH lamps deliver more of a blue/green spectrum, which is ideal for most plants in the vegetative/growth stage. Another type of lighting ideal for plant growth is T5 lighting. T5 lighting is a high-output fluorescent light with low heat and minimal energy consumption. It is an ideal light for cuttings, mother plants and short growth cycles. All plants require light in order to grow and bloom. Most plants grow and bloom according to the amount of light they are given. In the growth or vegetative stage plants typically want 15-18 hours of light. In the bloom stage you reduce the amount of light your plants get to 10-12 hours. You want to make sure the light comes on and off at the same time everyday (just like mother-nature). The best way to accomplish this is by putting your light on a timer. Please consult your nearest hydroponic retail store for more information on which light is best for you.

7) Testing equipment

There are many different meters available for testing pH, PPM, EC, temperature, humidity, CO_2 and light levels. Single meters are available as are combination meters that test and/or monitor your environmental conditions. The important thing to remember is your garden will only be as good as the limiting factor. Water, nutrient, light, temperature, humidity, CO_2 & circulation are the elements to a successful garden room. By "dialing in" these elements, you will ensure a successful and bountiful garden.

8) Optional accessories

There are many items available to help your garden grow. Organics, controls, fans, blowers, plant stakes, relays, nutritional supplements and the lists go on. Consult with your retail supplier to discuss what the best accessories for your garden are. Happy Gardening!!

Why Use Supplemental Lighting for Indoor or Greenhouse Gardening?

High intensity discharge (H.I.D.) lighting has traditionally been used only by commercial growers in large scale greenhouses. These business savvy professionals have long understood the exceptional benefits of supplemental, artificial lighting for plant growth. From stronger, healthier seed starts, into faster maturing, vigorous plants that offer much higher yields and more spectacular flowering than can be achieved without supplemental lighting. H.I.D. lighting not only supplements sunlight, but can actually replace it during long winters where sunlight is in short supply. It is very energy efficient and the cost of operating one of our light systems is comparable to using one of your kitchen appliances.

Plants need light for proper growth. The light spectrum range produced by artificial light (particularly H.I.D. light) enhances the natural light derived from the sun by many times over. The result… when combined with proper nutrients… is nothing short of AMAZING! And the best news is… this technology once available only to the commercial market is now available to you.

All this being said, what can supplemental lighting do for a home, hobby grower?

- SIGNIFICANTLY INCREASE the health, strength, growth rate and yield of your plants.
- SUPPLEMENT NATURAL SUNLIGHT in your backyard greenhouse virtually eliminates seasonal & geographical restraints. In addition, by extending the "day length" with supplemental lighting, you will greatly enhance your growing success.
- CONTAINER PLANTS that are outdoors on decks and patios during the summer can be moved indoors during the winter under H.I.D. or high output fluorescent light allowing them to thrive year round.
- INDOOR GARDENING – Why settle for gardening just a few months of the year? By using one of our light fixtures as a primary light source indoors, you can enjoy the hobby of gardening all year long!

High Intensity Discharge lighting systems have revolutionized indoor gardening in the last two decades. They are the most energy efficient grow lights available, so they produce much more light for the amount of power consumed.

LINEAR FLUORESCENTS

Traditional T12 and T8 fluorescent lighting is simply not powerful enough to light an area more than 8-10 inches below the bulb. With the recent introduction of the highly efficient T5 technology, T5 linear fluorescent fixtures can now put out a respectable 92.6 lumens per watt. T12 lamps typically put out about 30 lumens per watt. T5 fixtures are excellent for starting seeds and cuttings, but are also able to produce enough light for full term growth. Because of their minimal heat output, they can be placed very close to the plant canopy to maximize the light output.

HIGH WATTAGE SELF BALLASTED GROW LAMPS

These lamps have become quite popular in the recent past. We offer Feliz brand mogul base fluorescent lamps that put out about 70 lumens per watt. They are excellent for starting seeds or to use over a small garden area.

INCANDESCENT LAMPS

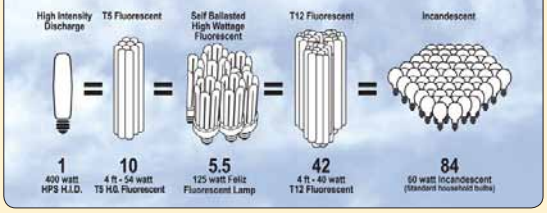
These standard household bulbs do not emit enough light, or the proper spectrum to be used by serious gardening enthusiasts. They are not very efficient, using a considerable amount of power for the light they emit. They are typically only about 15 lumens per watt.

WHICH LIGHT IS RIGHT FOR YOU?

Most gardeners use at least 25 watts per square foot of garden space. You may need less if your light is used to supplement natural sunlight, or if you are growing a plant that does not require as much light (ie: lettuce). However, many gardeners prefer to double or even triple the recommended wattage to achieve faster growth rates. There is really no such thing as too much light, but using a big light in a small space will sometimes result in high temperatures that are difficult to control. Keep in mind that plants need periods of darkness too. Most indoor gardeners use lighting from 12 - 18 hours per day.

LIGHT OUTPUT COMPARISON CHART

The lumen output is the same for each of these five scenarios shown below. Each represents a total lumen output of approximately 50,000.



HANGING HEIGHT

A general guideline for the proper hanging height of an H.I.D. lamp would be 12"-48" depending on wattage (see below). Make sure to check for excessive heat at the top of your plants by placing your hand (palm down) over your plants. If the top of your hand is hot, you need to move your lamp up higher. If the light source is too close to your plants, you can burn them. Remember that as your plants grow you will need to adjust the height of your lamp.

Please keep in mind that the latest air-cooled reflectors, like the Super Sun® 2 allow you to place higher wattage bulbs closer to plants than was possible in the past.

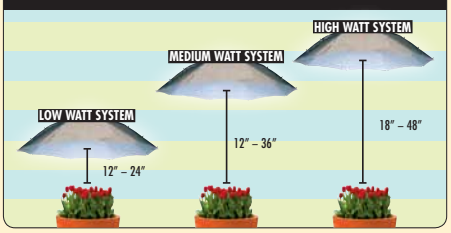
When you raise the light up & away from your plants, you need to be aware of the light levels at your plants will be significantly reduced.

As light moves away from its source (the lamp) it diminishes as follows: 1/Distance^2. For example: 1ft. = 1000 FC, 2ft. = 250 FC, 3ft. = 111 FC, 4ft. = 63 FC, 5ft. = 40 FC, & 6ft. = 28 FC.

COVERAGE AREA

A fluorescent fixture can be placed much closer to plants than an H.I.D. fixture because it produces very little heat. You should place your fluorescent lights as close to the tops of your plants as you can without excluding the outside perimeter of your garden.

TYPICAL MOUNTING HEIGHTS



H.I.D. AVERAGE COVERAGE AREA BY WATTAGE

150/175 watts covers approx 2' x 2' area
250 watts cover approx. 3' x 3' area
400 watts covers approx. 4' x 4' area
600 watts covers approx. 6.5' x 6.5' area
1000 watts covers approx. 8' x 8' area

NOTE: Coverage area may be reduced if this is your primary light source.

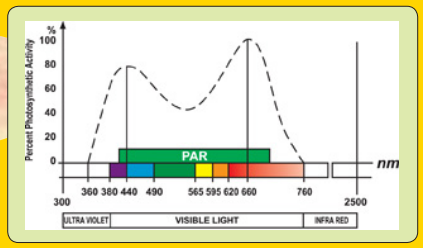
HIGH PRESSURE SODIUM (HPS) OR METAL HALIDE (MH)

If you choose H.I.D. as your source of lighting, you have another choice...HPS or MH. Sunlight Supply®, Inc. offers lights in MH and HPS. Metal Halide (MH) bulbs emit a light spectrum which appears blue-white to the human eye. This color spectrum is more conducive for vegetative growth, or starting seeds and cuttings. High Pressure Sodium (HPS) bulbs emit a spectrum which is more concentrated in red/orange light. This color is ideal for the fruiting and flowering stage of a plant's development. It is a good multi-purpose light as well.

Your style of gardening will determine which type of light is best for you. But whichever model you choose, you can be assured that your investment into the lighting technology used by the professional will be rewarded by increased, nutrition packed yields, lovelier flowers and healthier plants!

LIGHT REQUIRED FOR PHOTOSYNTHESIS

Only part of solar radiation is used by plants for photosynthesis. The photosynthetically active radiation (PAR) contains the wavelengths between 400 and 700 nanometers, and falls just within the so-called visible spectrum (380-770nm). The total visible spectrum is perceived by us humans as white light, but with the aid of a prism, we see that the "white" light is actually separated into a spectrum of colors from violet to blue, to green, yellow, orange and red. Plants use the blue to red light as their energy source for photosynthesis.



FAQ – Horticultural Lighting

General Lighting questions:

1) **What is HID Lighting?**
HID lighting stands for High Intensity Discharge, which is a special type of lighting that is much more intense (brighter) than other type of lighting available. An HID lighting system consists of a ballast, reflector, socket and lamp (light bulb). The ballast acts like the engine, converting and driving energy to illuminate the lamp. HID lighting options include High Pressure Sodium (HPS), Metal Halide (MH), Mercury Vapor and Low Pressure Sodium. The two typically used for plant growth are HPS and MH systems.

2) **What is Color Rendering Index (CRI), Color Temperature (K) and Lumen?**
Color Rendering Index is a subjective measurement of how well a lamp source renders colors. A measurement of the degree of color-shift an object undergoes when illuminated by a light source when compared to a reference source of comparable color temperature. Incandescent light is assumed to have a CRI of around 100 so it will render all colors correctly. MH only has a CRI of about 70, so only 70% of colors will be rendered correctly. HPS has a CRI of 22.

Color Temperature is not how hot the lamp is. Color temperature is the relative whiteness of a piece of tungsten steel heated to that temperature in degrees Kelvin. HPS has a warm (red) color temperature of around 2700K as compared to MH at 4200K, which has a cool (blue) color temperature.

What is important to remember about these two terms is that CRI readings, of two sources, can only be compared if their color temperature is equal. You cannot compare the CRI of HPS (CRI=22) vs. Metal Halide (CRI=70) because the color temperatures are different (2200K vs. 4500K).

Lumen is a measurement of light output. It refers to the amount of light emitted by one candle that falls on one square foot of surface located at a distance of one foot from the candle. Traditionally, lumens have been the benchmark of a lamps ability to grow plants; meaning the brighter the lamp the better the plant. However, studies have shown that a broader color spectrum lamp will perform much better than a lamp with high lumen output, especially when it comes to plant growth.

3) **What is the difference between MH and HPS with regards to plant growth?**
MH lamps provide more of the blue/green spectrum, which is ideal for leafy crops, and/or plants that are in a vegetative (actively growing) stage. MH lamps provide a more natural appearance in color and are typically the choice for plants that have little to no natural light available. HPS lamps provide more yellow/orange/red spectrum, which is ideal for most plants that are actively fruiting and flowering. In addition, HPS lighting is the choice for growers looking to supplement natural sunlight. Ideally, the horticulturalist will use MH to grow their plants and HPS to fruit and flower their plants.

4) **What is the difference between HID and Fluorescent lighting with regards to plant growth?**
Traditionally, fluorescent lighting was used for seedlings, cuttings and plants with low light-level requirements and HID was used for established plants and plants with higher light-level requirements. Advances in fluorescent lighting technology, however, have provided more options for horticulturists. T5 fluorescent lighting is the latest in plant growth lighting. T5's high-light output combined with its low heat and energy consumption makes it an ideal light source to grow a broader array of plants.

5) **What are the benefits of using T5 fluorescent lighting for plant growth?**
T5 lamps provide the ideal spectrum for plant growth. Photosynthesis rates peak at 435 nm and 680 nm. A 6500K T5 lamp has a spectral distribution with relative intensity peaks at 435 nm and 615 nm. This equates to very little wasted light energy in terms of plant growth. T5 lamps promote incredible health and vigor of seedlings and cuttings. Root development is superior relative to other lighting sources. While T5 lighting is excellent for starting seeds and cuttings, it's also able to produce enough light for full term growth. Because of their minimal heat output, T5 lamps can be placed 6" -8" above the plant canopy which maximizes photosynthetic response. Unlike conventional fluorescents, plants grown under T5 lamps do not have to be rotated to the center of the lamp. T5's slim diameter enables better photo-optic control of the emitted light, increasing efficiency in the form of even light distribution.

Environmental Impacts of T5 (at a glance):

- T5 lamps have a diameter of 5/8" – smaller is better when it comes to manufacturing, transportation and disposal.
- Reduction in raw materials and components needed for manufacturing.
- Reduction in lamp and fixture packaging materials due to relative size.
- T5 are constructed of 40% less glass than T8.
- T5 contain 30% less phosphor than T8.
- T5 contain 3mg of mercury. 70% less than T8.
- Longer lamp life means reduced maintenance cost and less going to the landfill.

6) **What are the major differences between HID ballasts and electronic ballasts?**
Frequency output to the lamp and energy conversion from electricity to usable light are the biggest differences between HID ballasts and electronic ballasts. HID ballasts produce a frequency of 60 Hz. Electronic ballasts vary from manufacturer to manufacturer, but the frequency produced can be 400x that of an HID ballast. HID ballasts produce more heat than electronic ballasts, thus making electronic ballasts more energy efficient. You will not, however, save money on your electric bill by using electronic ballasts. HID lighting has been available for 60+ years, while electronic ballast (especially 400 watt and higher) is a relatively new technology.

7) **Are electronic ballasts more energy efficient?**
Electronic ballasts are more efficient at converting electricity into usable light. Since your power bill is based on kilowatt-hours and not efficiency, a 1000 watt electronic ballast will cost you about the same as a 1000 watt HID ballast to operate.

8) **How much energy will my light use?**
An average lighting system will increase your electricity cost about $8 to $20 per month. The exact amount depends on the wattage of the system and the number of hours operated. To calculate your cost, multiply the bulb wattage X the number of hours of operation and divide by 1000. This figure is the number of kilowatt-hours of electricity used. (Example: a 400 watt lamp running for 18 hours will use 7.2 kilowatt-hours). Check your power bill for the cost of each kilowatt-hour. Then multiply the number of kilowatt-hours used by the cost of a kilowatt-hour (K/hr) to figure the cost to run your light for that many hours.

9) **Do I need special wiring in my house for my lighting system?**
Lighting systems are available in a variety of voltages. The standard used by most gardeners is 120 volts / 60 Hz which plugs into a standard wall outlet. Other voltages may require special circuits and receptacles. Always contact a licensed electrician if the light you purchased has special voltage requirements and never exceed more than 75% of the rated ability of the fuse/breaker. (For example: use no more than 15 amps on a 20-amp circuit.)

10) **What voltages are available for HID and Fluorescent lights?**
HID systems are available in 120 volt, 208 volt, 240 volt, 277 volt and 480 volt - All at 60 Hz. Fluorescent lighting varies, but most are available from 100 volt to 277 volt and 50 Hz or 60 Hz.

11) **Will I save on my electric bill if I run my system with 240 volts?**
No. Electric companies base your electrical bill on Wattage, not Voltage or Current. While ballasts wired for 240 volt will draw less current and run a little cooler than one wired for 120 volt, it will not save you money on your electric bill.

12) **How often do I need to change my light bulb?**
Most lamp manufacturers rate their lamps by "Average Life Hours" and usually claim 10,000 to 24,000 hours. These ratings are based on when the lamp will completely fail to come on. They do not factor in loss of intensity or loss of color. HID lamps lose intensity and color through normal use. This is OK if you are lighting a warehouse, but when it comes to plant growth, these losses can mean wasted electricity and poor plant performance. Serious horticulturalists recommend that you replace your lamps after 6000 hours of use. This equates to using your light 16 hours a day for one year.

FAQ – Horticultural Lighting

13) **How long should I run my lights?**
This depends on the type of plants and whether you have natural sunlight available to your garden. As a general rule, when you are in a vegetative stage of plant growth and you have no natural sunlight, run your lights 14-18 hours a day. If you have natural sunlight, it will vary because the sunlight may or may not be direct. It will take a little experimenting to find the best length of time to run your lights. If you are actively fruiting and flowering, the rule is to run your lights 12 hours a day if you have no natural light.

14) **How high do I need to hang my lights above my plants?**
The higher the wattage the further away you want the light to be from your plants due to the amount of heat. HID lighting will be further away than a fluorescent fixture because of this. When mounting your lighting fixture take into account the type of plant and how tall the plant will grow. You want to keep the light as close as you can, but not so close to burn the plant. A simple rule is "if it is comfortable for the back of your hand, it will be a safe distance for your plants". Doing a little research on the type of plant and where it comes from will help in determining how much (or little) light your plants like. With fast growing plants, you may need to check the hanging height on a regular basis as plants that get too close to the lamp will be severely burned.

15) **How big of an area will my light cover?**
The size of the garden area will determine the wattage you need. If we assume that the plants will get no sunlight, a 1000 watt light will cover about 7 x 7 feet of growing area. A 600 watt will cover 6 x 6 feet, a 400 watt will cover 4 x 4 feet, and a 250 watt will cover 3 x 3 feet. These sized areas would be considered the "Primary Growing" areas. These lights will light-up larger areas, but plants placed outside of the Primary Growing area, will stretch and bend toward the light; a phenomenon called phototropism. Keep these areas of coverage in mind when using multiple fixtures. The best results occur when the areas of coverage overlap.

16) **Why do I need glass to get the ETL Listing on a Metal Halide light?**
The inner arc tube of a Metal Halide lamp contains mercury. Eddison Testing Laboratories has stated that for a Metal Halide fixture to maintain its ETL Listing, that an additional tempered safety lens is required in the event that the arc-tube and outer glass fail. This will prevent the spread of Mercury.

17) **Can I run a 1000 watt bulb in my 400 watt lighting system?**
No! The internal components of the ballast are designed to send the correct voltage and current for the rated lamp. Mixing lamps and ballasts will result in premature failure and will void the manufacturers' warranty. Consider the size area you want your garden to be prior to making a lighting purchase. It is better to grow into a fixture than out of one.

18) **Can I run a 430 watt bulb in a 400 watt lighting system?**
Yes, the internal components of 400 watt and 430 watt ballasts are almost identical. You will only get 400 watts of light out of the 430 watt lamp, however.

19) **Do I need to wear gloves when handling an HID light bulb?**
Manufacturers do not state that gloves are required when handling their lamps. It is recommended that your hands be thoroughly washed prior to handling HID lamps though.

20) **What is a conversion bulb?**
A lamp that operates on the opposite ballast it was originally designed for. For example, a 940 watt conversion lamp is an HPS lamp that runs on a 1000 watt Metal Halide Ballast. There are also MH lamps that are designed to operate on HPS ballasts. These bulbs allow the grower to purchase the ballast of their choice and offer the flexibility of growing a variety of plant types by simply changing the lamp they need.

Sun System® lighting fixture questions:

1) **Which Sun System® Reflectors have built-in socket assemblies?**
- Agrotech™
- Adjust-A-Wing (all types)
- BlockBuster™ 6" & 8"
- Cool Sun
- Cool Sun XL
- Econowing
- Great White
- Magnum XXXL 6" & 8"
- Silver Sun
- Sun Tube ™ 6"
- Super Sun®
- Super Sun® 2
- Yield Master 8" & 10"
- Yield Master™ II 4" Classic
- Yield Master™ II 6" Supreme & Classic

2) **Which Sun System® Reflectors accept BT-56 bulbs?**
- Agrotech Magnum
- Cool Sun
- Cool Sun XL
- Great White
- Large Convertible
- Magnum XXXL 6" & 8"
- Yield Master 10"

3) **Does a BT-56 lamp perform better than a BT-37?**
No! BT-56 was the standard for many years. The reduced jacketed BT-37 will provide the same intensity and color that a BT-56 lamp provides. BT-37 is a physically smaller lamp and is easier to ship and handle.

4) **Is the socket assembly sold separate for Sun System® ballasts?**
Yes

5) **How do I clean the inside of my Sun System® Reflector?**
Warm water and mild dish soap are the best to clean and maintain the highly reflective finish. Avoid bleach, ammonia and other harsh or abrasive cleaners.

Watts, Amps & Volts Formula
Amps = Wattage ÷ Voltage
Voltage = Wattage ÷ Amps

AMPS are how many electrons flow past a certain point per second. VOLTAGE is a measure of how much force that each electron is under. WATTAGE is the electric power required by an appliance or device.

Common Size Conversions			
n/a	3.38 ounces	100 milliliter	0.1 Liter
n/a	4 ounces	118.3 milliliter	0.118 Liter
1/2 Pint	8 ounces	237 milliliter	0.237 Liter
Pint	16 ounces	473 milliliter	0.473 Liter
Quart	32 ounces	946 milliliter	0.946 Liter
Gallon	128 ounces	3785 milliliter	3.785 Liter
2.5 Gallon	320 ounces	9464 milliliter	9.464 Liter
5 Gallon	640 ounces	18930 milliliter	18.93 Liter
6 Gallon	768 ounces	22710 milliliter	22.71 Liter

Quick Reference/Conversions

Conversions

1 US gallon is equal to:		
4 quarts	128 ounces	768 tsp
8 pints	3.785 liters	8.34 lbs
16 cups	256 tbsp	231 cu. in.

1 cup is equal to:		
8 ounces	48 tsp	0.23 liter
½ pint	236 ml	14.4 cu. in.
16 tbsp	0.52 lbs	236 grams

1 tablespoon is equal to:		
½ ounce	3 tsp	15 grams
15 ml	180 drops	0.663 cup

1 liter is equal to:		
1000 ml	4.328 cups	202.88 tsp
2.164 pints	67.63 tbsp	0.264 gal
1000 grams	2.22 lbs	1.057 quarts

Measurement equivalents	
3 tsp = 1 Tbsp	1 ml = 1/5 tsp
2 Tbsp = 1 fluid oz	5 ml = 1 tsp
16 Tbsp = 1 cup	15 ml = 1 Tbsp
2 cups = 1 pint (16 oz)	30 ml = 1 fluid oz
2 pints = 1 quart (32 oz)	240 ml = 1 cup
4 quarts = 1gal (128 oz)	3840 ml = 1 gal

Definitions & Abbreviations

ppm = parts per million
mho = conductivity
mS = millisiemen
uS = microsiemen
tds = total dissolved solids
ec = electrical conductivity
pH = potential hydrogen

1 Siemen = 1000 mS
1 mS = 1000 uS
1 mS = 500 ppm (standard)
1 mS = 650 ppm (horticultural)
1 mg/liter = 1 ppm

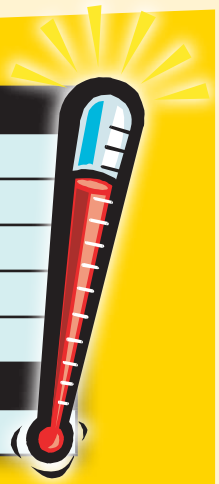
C Carbon	Mn Mangenese
Ca Calcium	Mo Molybdenum
Cl Chlorine	N Nitrogen
Cu Copper	Na Sodium
Fe Iron	O Oxygen
F Fluorine	P Phosphorus
H Hydrogen	S Sulfur
K Potassium	Zn Zinc

Lighting Conversion

1 footcandle = lumen/ft^2

°F/°C TEMPERATURE CONVERSION			
200°C = 392°F	100°C = 212°F	75°C = 167°F	40°C = 104°F
150°C = 302°F	95°C = 203°F	70°C = 158°F	30°C = 86°F
125°C = 257°F	90°C = 194°F	65°C = 149°F	20°C = 68°F
110°C = 230°F	85°C = 185°F	60°C = 140°F	10°C = 50°F
105°C = 221°F	80°C = 176°F	50°C = 122°F	0°C = 32°F

°F/°C TEMPERATURE FORMULA	
°C = (°F - 32) x 5/9	°F = (°C x 9/5) + 32



Glossary of Terms

Glossary of Horticultural Terms

Alternating Current (AC): An electric current that reverses its direction at regular occurring intervals. Homes have AC.

Acid: An acid or sour substance has a pH below 7.

Aeration: Supplying soil and roots with air or oxygen.

Aeroponics: Growing plants by misting roots suspended in air.

Alkaline: Refers to a substance with high pH; Any pH over 7 is considered alkaline.

All-Purpose (General-Purpose) Fertilizer: A balanced blend of N-P-K; All purpose fertilizer is used by most growers.

Amendment: Fortifying soil by adding organic or mineral substances in order to improve texture, nutrient content or biological activity.

Ampere (Amp): The unit used to measure the strength of an electric current.

Annual: A plant that normally completes it entire life cycle in one year or less. Tomatoes are examples of annual plants.

Arc: Luminous discharge of electricity (light) between two electrodes.

Arc Tube: A quartz container for luminous gases also houses the arc in HID lights.

Auxin: Classification of plant hormones; Auxins are responsible for foliage and root elongation.

Bacteria: Very small, one-celled organisms.

Beneficial Insect: A good insect that eats bad flower and vegetable munching insects.

Biodegradable: Able to decompose or break down through natural bacterial or fungal action, substances made of organic matter are biodegradable.

Bolt: Term used to describe a plant that has gone to seed prematurely.

Bonsai: A very short or dwarfed plant.

Breaker Box: Electrical circuit box having on/off switches rather than fuses.

Breathe: Roots draw in or breathe oxygen, stomata draw in or breathe carbon dioxide.

Bud Blight: A withering condition that attacks flower buds.

Buffering: The ability of a substance to reduce shock and cushion against pH fluctuations.

Bulb: The outer glass envelope or jacket that protects the arc tube of an HID lamp.

Bulbs: Common are tulips and daffodils planted in the fall for spring blooms, or forced indoors for winter blooms.

Calyx: The pod harboring female ovule and two protruding pistils, seed pod.

Carbon Dioxide: (CO_2) A colorless, odorless, tasteless gas in the air necessary for plant life and biomass accumulation.

Carbohydrate: Neutral compound of carbon, hydrogen and oxygen. Sugar, starch and cellulose are carbohydrates.

Caustic: Capable of destroying, killing or eating away by chemical activity.

Cell: The base structural unit that plants are made of; cells contain a nucleus, that houses it's DNA.

Cellulose: A complex carbohydrate that stiffens a plants tissue.

CFM: Cubic feet per minute.

Chelate: Combining nutrients in an atomic ring that is easy for plants to absorb.

Chlorine: Chemical used to purify water.

Chloroplast: Containing chlorophyll.

Chlorosis: The condition of a sick plant with yellowing leaves due to inadequate formation of chlorophyll. Chlorosis is caused by nutrient deficiency, usually iron or imbalanced pH.

Clay: Soil made of very fine organic mineral particles. Clay is not suitable for container gardening.

Climate: The average condition of the weather in a garden room or outdoors.

Color Spectrum: The band of colors (measured in nm) emitted by a light source.

Color Temperature: The relative whiteness of a piece of tungsten steel heated to that temperature in degrees kelvin.

Color Tracer: A coloring agent added to many commercial fertilizers, so the horticulturist knows there is fertilizer in the solution.

Compaction: Soil condition that results from tightly packing soil; compacted soil allows for only marginal aeration and root penetration.

Companion Planting: Planting garlic, marigolds, etc., along with other plants to discourage insect infestation.

Compost: A mixture of decayed organic matter.

Core: The transformer in the ballast is referred to as the core in HID lighting systems.

Corms, Rhizomes and Tubers: Dormant stems planted in the fall for spring blooms, or forced indoors for winter blooms. Common varieties are dahlias and irises.

Cotyledon: Energy storage components of a seed that feed the plant before the emergence of its first true leaves.

Cross-Pollinate: Pollinating two plants having different ancestry.

Cubic Foot: Volume measurement in feet: L" x W" x H" ÷ 1728" = Cu. Ft.

Cutting: (1) Growing tip cut from a parent plant for asexual propagation (2) Clone.

Damping-Off: Disease that attacks young seedlings and cuttings causing stem to rot at base.

Direct Current (DC): An electric current that flows in only one direction.

Deplete: Exhaust soil of nutrients, making it infertile.

Desiccate: Cause to dry up. Insecticidal soap desiccates its victims.

Dioecious: Having distinct male and female organs on different plants within the same species.

Dome: The part of the HID outer bulb opposite the neck and threads.

Dome Support: The spring like brackets that mount the arc tube within the outer envelope.

Drainage: Way to empty soil of excess water: with good drainage, water passes through soil evenly.

Drip Line: A line around a plant directly under its outermost branch tips: Roots seldom grow beyond the drip line.

Drip System: A very efficient watering system that employs a main hose with small water emitters.

Dry Ice: A cold, white substance formed when carbon dioxide is compressed and cooled; dry ice changes into CO_2 gas at room temperature.

Electrode: A conductor used to establish electrical arc or contact with non-metallic part of circuit.

Elongate: Growth in length.

Envelope: Outer protective bulb or jacket of a lamp.

Equinox: The point at which the sun crosses the equator and day and night are each 12 hours long; the equinox occurs twice a year, in spring and fall.

Feed: Deliver nutrient to the plant via roots or foliage.

Female: Pistillate, ovule, seed-producing.

Ferreting: To fertilize and irrigate at the same time.

Fertilizer Burn: Over fertilization: first leaf tips burn (turn brown) then the leaves curl.

Flat: Shallow (three inch) deep container, often 18 by 24 or 10 by 20 inches with good drainage, used to start seedlings or cuttings.

Fluorescent Lamp: Electric lamp using a tube filled with fluorescent material, which has a low heat output.

Foliage: The leaves or more generally, the green part of a plant.

Foliar Feeding: Misting fertilizer solution which is absorbed by the foliage. Best to do when first turning on your lights.

Foot-Candle: The unit is defined as the amount of illumination that the surface of an imaginary 1-foot radius sphere would be receiving if there were a uniform point source of one candle in the exact center of the sphere. The foot-candle is equal to one lumen per square foot. Foot-candle is a derived unit of illuminance from Lux. One foot-candle is equal to 10.76 lux.

Fungistat: A product that inhibits fungus keeping it in check.

Fungus: A lower plant lacking chlorophyll which may attack green plants; mold, rust, mildew.

Fuse: Electrical safety device consisting of a metal that melts and interrupts the circuit when circuit is overloaded.

Fuse Box: A box containing fuses that control electric circuits.

GPM: Gallons per minute.

Gene: Part of a chromosome that influences the development of plant; genes are inherited through sexual propagation.

Genetic Make Up: The set of genes inherited from parent plants.

Halide: Binary compound of a (halogens) with an electropositive elements.

Hermaphrodite: One plant having both male and female organs; the breeding of hermaphrodites is hard to control.

Hertz (hz): A unit of frequency that cycles one time each second: a home with 60 Hertz AC current cycles 60 times per second.

HID: High Intensity Discharge.

Honey Dew: A sticky, honey like substance secreted into foliage by aphids, scale and mealy bugs.

Hood: Reflective cover of a HID lamp.

HOR: The abbreviation stamped on some HID bulbs meaning they must be burned in a horizontal position.

Horizontal: Parallel to the horizon, ground or floor.

Hormone: Chemical substance that controls the growth and development of a plant. Root-inducing hormones help cuttings root.

Humidity: (relative): Ratio between the amount of moisture in the air and the greatest amount of moisture the air could hold at the same temperature.

Humus: Dark, fertile, partially decomposed plant or animal matter; humus forms the organic portion of the soil.

Hybrid: An offspring from two plants of different breeds, variety or genetic make up.

Glossary of Terms

Hydrated Lime: Instantly soluble lime, used to raise pH or sweeten soil.

Hydrogen: Light or colorless, odorless gas; hydrogen combines with oxygen to form water.

Hygrometer: Instrument for measuring relative humidity in the atmosphere.

Inbred: (True Breed) Offspring of plants of the same breed or ancestry.

Inert: Chemically non-reactive; inert growing mediums make it easy to control the chemistry of the nutrient solution.

Intensity: The magnitude of the light energy per unit; intensity diminishes the farther away from the source.

Jacket: Protective outer bulb or envelope of lamp.

Kilowatt Hour: Measure of electricity used per hour; a 1000-watt HID uses one kilowatt in one hour.

Lacewing: Beneficial insects that preys on aphids.

Leach: Dissolve or wash out soluble components of soil by heavy watering.

Leaf Curl: Leaf malformation due to over-watering, over fertilization, lack of magnesium, insect or fungus damage or negative tropism.

Leaflet: Small immature leaf.

Leaves: The external part of a plant attached to branches and stems for the purpose of taking in light from the sun's energy. They do this with chloroplasts in the cells which contain chlorophyll.

Leggy: Abnormally tall internode space, with sparse foliage. Leggyness of a plant is usually caused by lack of blue light or CO2. Too much nitrogen can also cause this.

Life Cycle: A series of growth stages through which a plant must pass in Its natural lifetime; the stages for an annual plant are seed, seedling, vegetative and floral.

Light Mover: A device that moves a lamp back and forth or in a circle across the ceiling of a garden room to provide more even distribution of light.

Lime: Used in the form of dolomite or hydrated lime to raise and stabilize soil pH.

Litmus Paper: Chemically sensitive paper used for testing pH.

Loam: Organic soil mixture of crumbly clay, silt and sand.

Lumen: Measurement of light output: one lumen is equal to the intensity of light emitted by one candle that falls on one square foot of surface located one foot away from one candle.

Macro Nutrient: One or all of the primary nutrients N-P-K or the secondary nutrients magnesium and calcium.

Mean: Average throughout life; HID's are rated in mean lumens.

Meristem: Tip of plants growth.

Micro Nutrient: Also referred to as trace elements, including S, Fe, Mn, B, Mo, Zn, and Cu.

Millimeter: Thousandth of a meter approximately .04 inch.

Moisture Meter: An electronic device that measures the exact moisture content of soil at any given point.

Monochromatic: Producing only one color; LP sodium lamps are monochromatic.

Mulch: A protective covering of organic compost, leaves, etc.; indoors, mulch keeps soil too moist and possible fungus could result.

Nanometer: .000000001 Meter, nm is used as a scale to measure wave lengths of light; color and light spectrums are expressed in nanometers (nm).

Necrosis: Localized death of a plant part.

Neck: Tubular glass end of the HID bulb, attached to the threads.

Nutrient: Plant food, essential elements N-P-K, secondary and trace elements fundamental to plant life.

Ohm's Power Law: A law that expresses the strength of an electric current; volts times amperes equals watts.

Organic: Made of, or derived from or related to living organisms. In agriculture organic means "natural". In chemistry organic means "a molecule or substance that contains carbon".

Ovule: A plant's egg found within the calyx, it contains all the female genes; when fertilized, an ovule will grow into a seed.

Oxygen: Tasteless, colorless element, necessary in soil to sustain plant life as well as animal life.

Parasite: Organism that lives on or in another host organism; fungus is a parasite.

Peat: Partially decomposed vegetation (usually moss) with slow decay due to extreme moisture and cold.

Perennial: A plant, such as a tree or shrub, which completes its life cycle over several years.

pH: A scale from 1 to 14 that measures the acid to alkaline balance of a growing medium (or anything); in general plants grow best in a range of 5.5 to 6.8 pH.

pH Tester: Electronic instrument or chemical used to find where soil or sater is on the pH scale.

Photometrics: The study of light, especially color.

Phosphor Coating: Internal bulb coating that diffuses light and is responsible for variations in color outputs.

Photoperiod: The relationship between the length of light and dark in a 24 hour period.

Photosynthesis: The building of chemical compounds (carbohydrates) from light energy, water and carbon dioxide.

Phototropism: The specific movement of a plant part towards a light source.

Pigment: The substance in paint or anything that absorbs light, producing (reflecting) the same color.

Pollen: Fine, dust like micro-spores containing male genes.

Power Surge: Interruption or change in intensity of electricity.

Primary Nutrients: N-P-K

Propagate: (1) Sexual: Produce a seed by breeding different male and female flowers (2) Asexual: To produce a plant by taking cuttings.

Prune: Alter the shape and growth pattern of a plant by cutting stems and shoots.

PVC Pipe: Plastic (polyvinyl chloride) pipe that is easy to work with, readily available and used to pipe water into a garden room.

Pyrethrum: Natural insecticide made from the blossoms of various chrysanthemums.

Root Bound: Roots stifled or inhibited from normal growth, by the confines of a container.

Roots: Their purpose is to anchor a plant and provide a means in which to feed and hydrate a plant.

Rejuvenate: Restore youth; a mature plant, having completed its life cycle (flowering), may be stimulated by a new 18 hour photo period, to rejuvenate or produce new vegetative growth.

Salt: Crystalline compound that results from improper pH or toxic buildup of fertilizer. Salt will burn plants, preventing them from absorbing nutrients.

Secondary Nutrients: Calcium (ca) and Magnesium (mg).

Seed Pod: A dry calyx containing a mature or maturing seed.

Short Circuit: Condition that results when wires cross and form a circuit. A short circuit will blow fuses.

Socket: Threaded, wired receptacle for a bulb.

Soluble: Able to be dissolved in water.

Spore: Seed like offspring of a fungus.

Sprout: (1) A recently germinated seed (2) Small new growth of a leaf or stem.

Square Feet (Sq Ft): Length (in feet) times width equals square feet.

Stamen: Male, pollen-producing.

Starch: Complex carbohydrate; starch is manufactured and stored in food.

Sterilize: Make sterile (super clean) by removing dirt, germs and bacteria.

Stroboscopic Effect: A quick pulsating or flashing of a lamp.

Stress: A physical or chemical factor that causes extra exertion by plants; a stressed plant will not grow as well as a non stressed plant.

Stomata: Small mouth like or nose like openings (pores) on leaf underside, responsible for transpiration and many other life functions; the millions of stomata, must be kept very clean to function properly.

Sugar: Food product of plant. Carbohydrates that contain hydrocarbon chain.

Synthesis: Production of a substance, such as chlorophyll, by uniting light energy and elements or chemical compounds.

Tap Root: The main or primary root that grows from the seed; lateral roots will branch off the tap root.

Tepid: Warm 70 to 80 degrees F (21 to 27 degrees C); always use tepid water around plants to facilitate chemical processes and ease shock.

Terminal Bud: Bud at the growing end of the main stem.

Thin: Cull or weed out weak, slow growing seedlings.

Transformer: A device in the ballast that transforms electric power from one voltage to another.

Transpire: Give off water vapor and bi-products via stomata and carbon dioxide intake at the leaves.

Trellis: Frame or netting (lattice) that trains or supports plants.

Tungsten: A heavy, hard metal with high melting point which conducts electricity well; tungsten is used for a filament in tungsten halogen and incandescent lamps.

Ultraviolet: Light with very short wave lengths, out of the visible spectrum, past the blue-violet.

Variety: Strain, phenotype.

Vent: Opening such as a window or door that allows the circulation of fresh air.

Ventilation: Circulation of fresh air, fundamental to a healthy indoor garden, an exhaust fan creates excellent ventilation.

Vertical: Up and down perpendicular to the horizontal.

Wetting Agent: Compound that reduces the droplet size and lowers the surface tension of the water, making it wetter.

Wick: Part of a passive hydroponic system using a wick suspended in the nutrient solution, the nutrients pass up the wick and are absorbed by the medium and roots.

Quick Reference/Conversions

The NPK's of Growing

(N) NITROGEN

Nitrogen is essential for plant growth. Nitrogen is a part of every living cell. The two forms of nitrogen which plants take up are in the ammonia (NH4) and nitrate (N03) ion forms. Most agronomic crops take up most of their nitrogen in the nitrate ion form. Plants will utilize N in the (NH4) ion form if present and available to the plant.

Lack of nitrogen and chlorophyll means that plants cannot utilize sunlight as an energy source to carry on essential functions such as nutrient uptake. Research has proven foliar or leaf applications of nitrogen is one form of application that can supplement a plants nitrogen requirements during the growing cycle.

- Nitrogen is necessary for chlorophyll synthesis and as a part of the chlorophyll molecule is involved in photosynthesis.
- Nitrogen is also a component of amino acids.
- Nitrogen is needed for growth of plants.

From the Greek words "nitron genes" meaning "nitre" and "forming" and the Latin word "nitrum". Discovered in Scotland by Daniel Rutherford in 1772.

(P) PHOSPHORUS

Phosphate is a very important plant nutrient (macro-nutrient) needed for the plant to complete its normal production cycle. The highest level of P in young plants is found in tissue at the growing stage. As plants mature most of the P moves into the flower and then to the seed or fruit.

- Phosphorus is needed for photosynthesis.
- Phosphorus is necessary for plant respiration.
- Phosphorus is essential for energy storage and transfer.
- Phosphorus is needed for cell division.
- Phosphorus is necessary for cell enlargement.
- Phosphorus is essential for several other plant processes.

From the Greek word "phosphoros" meaning "bringer of light" (an ancient name for the planet Venus?). Discovered in Germany by Hennig Brand in 1669.

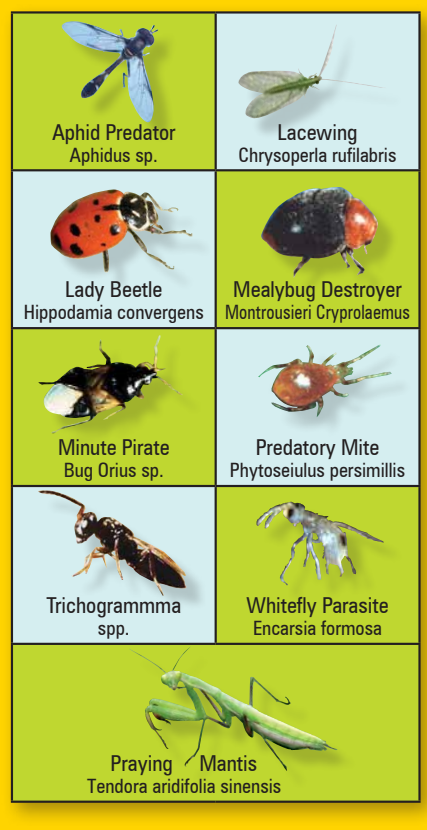
(K) POTASSIUM

An important function of Potassium is it's influence in efficient water use. It helps in the process of opening and closing of plant leaf pores, called the stomata. Potassium is found in cell walls which surround stomata. Adequate amounts of Potassium can increase stress conditions on plants during drought conditions. Potassium is also responsible for producing quality crops.

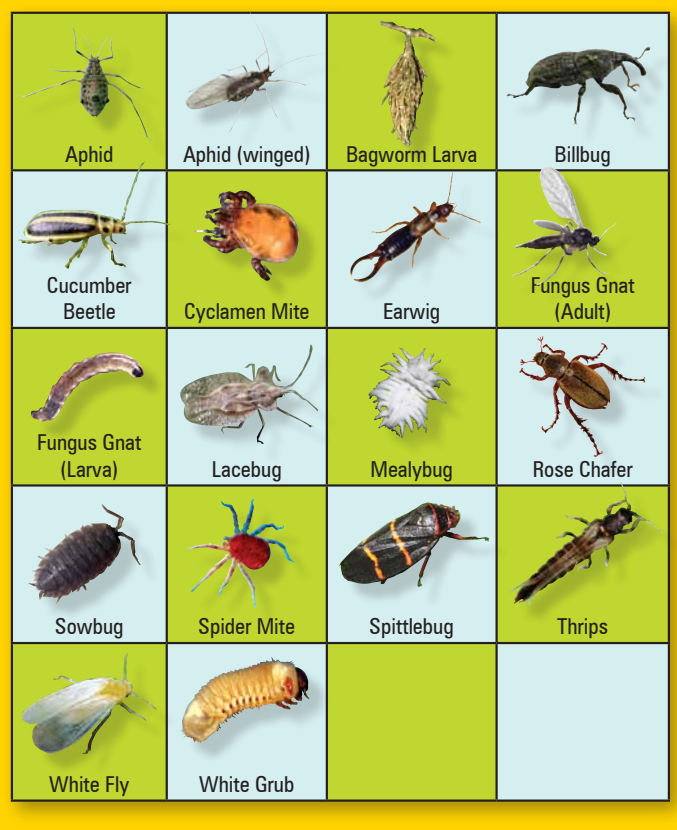
- Potassium is essential for protein synthesis.
- Potassium is important in the breakdown of carbohydrates, providing energy for plants.
- Potassium helps to control ionic balance.
- Potassium is important in the translocation of minerals.
- Potassium helps plants to overcome effects of disease.
- Potassium is essential in the fruit formation stage.
- Potassium helps improve shelf life of fruits and vegetables.
- Potassium is involved in the activation of more than 60 enzymes which regulate the rates of major plant growth reactions.

From the English word "potash" and the Arabic word "qali" meaning alkali ("K" comes from the Latin word "kalium"). Discovered in England by Sir Humphrey Davy in 1807.

Beneficial Insects



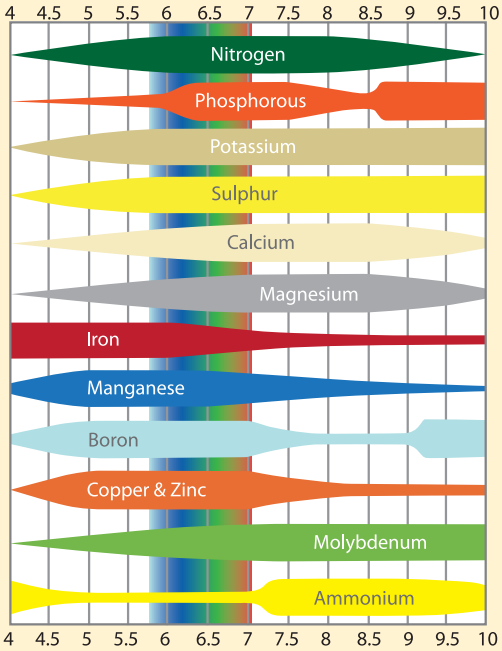
Destructive Insects, Mites



Quick Reference/Conversions

Measurement Conversion Chart

This measurement conversion chart, provided by Bluelab®, is a useful tool for all hydroponic growers. It allows you to convert between common units of measure when testing your nutrient solution.



This pH Chart (right) shows the Safe Zone is between 5.8 and 6.8.

Bluelab Measurement Conversion Chart

mS/cm² millisiemen per cm²	EC	CF	ppm 500 (TDS) (USA)	ppm 700 (UK, CA, AUST)
0.1	0.1	1	50	70
0.2	0.2	2	100	140
0.3	0.3	3	150	210
0.4	0.4	4	200	280
0.5	0.5	5	250	350
0.6	0.6	6	300	420
0.7	0.7	7	350	490
0.8	0.8	8	400	560
0.9	0.9	9	450	630
1.0	1.0	10	500	700
1.1	1.1	11	550	770
1.2	1.2	12	600	840
1.3	1.3	13	650	910
1.4	1.4	14	700	980
1.5	1.5	15	750	1050
1.6	1.6	16	800	1120
1.7	1.7	17	850	1190
1.8	1.8	18	900	1260
1.9	1.9	19	950	1330
2.0	2.0	20	1000	1400
2.1	2.1	21	1050	1470
2.2	2.2	22	1100	1540
2.3	2.3	23	1150	1610
2.4	2.4	24	1200	1680
2.5	2.5	25	1250	1750
2.6	2.6	26	1300	1820
2.7	2.7	27	1350	1890
2.8	2.8	28	1400	1960
2.9	2.9	29	1450	2030
3.0	3.0	30	1500	2100
3.1	3.1	31	1550	2170
3.2	3.2	32	1600	2240
3.3	3.3	33	1650	2310
3.4	3.4	34	1700	2380
3.5	3.5	35	1750	2450
3.6	3.6	36	1800	2520

pH - Why it's important

The pH scale, from 1 to 14, measures acid-to-alkaline balance. The number 1 is the most acidic, 7 is neutral, and 14 most alkaline. Every full-point change in pH signifies a ten-fold increase or decrease in acidity or alkalinity. For example, soil or water with a pH of 5 is ten times more acidic than water or soil with a pH of 6. Water with a pH of 5 is one hundred times more acidic than water with a pH of 7. With a ten-fold difference between each point on the scale, accurate measurement and control is essential to a strong, healthy garden.

Most plants grow best in soil with a pH from 6.5 to 7. Within this range plants can properly absorb and process available nutrients most efficiently. If the pH is too low (acidic), acid salts chemically bind nutrients, and the roots are unable to absorb them. An alkaline soil with a high pH causes nutrients to become unavailable. Toxic salt buildup that limits water intake by roots also becomes a problem. Hydroponic solutions perform best in a pH range a little lower than for soil. The ideal pH range for hydroponics is from 5.8 to 6.8. Some gardeners run the pH at lower levels and report no problems with nutrient uptake. The pH of organic soil mixes is very important because it dictates the ability of specific pH-sensitive bacteria.

Measure the pH with a soil test kit, litmus paper, or electronic pH tester, all of which are available at most nurseries. When testing pH, take two or three samples and follow instructions supplied by the manufacturer "to the letter". Soil test kits measure soil pH and primary nutrient content by mixing soil with a chemical solution and comparing the color of the solution to a chart. Most of these kits are difficult for novice gardeners to achieve accurate measurements. Comparing the color of the soil/chemical mix to the color of the chart is often confusing. If you use one of these kits, make sure to buy one with good, easy-to-understand directions, and ask the sales clerk for exact recommendations on using it.

Container Capacities

PROD. #	POT SIZE	POT CAPACITY
724140	5"x 5"x 6.5" square pot black jumbo senior	2.8 qt. / 2.65 liter
724150	5"x 5"x 6.5" square pot white jumbo senior	2.8 qt. / 2.65 liter
724160	6"x 6"x 7" square pot black magnum	4.35 qt. / 4.1 liter
724425	5.5"x 5.5"x 6" square pot white jumbo	3.15 qt. / 3 liter
724525	Am Hydro Perfect Pot	1.75 gal. / 7 qt. / 6.6 liter
724540	1 gallon nursery pot	1 gal. / 4 qt. / 3.78 liter
724545	2 gallon nursery pot	2 gal. / 8 qt. / 7.57 liter
724550	3 gallon nursery pot	3 gal. / 12 qt. / 11.35 liter
724555	5 gallon nursery pot	5 gal. / 20 qt. / 19 liter

Pot Size	# of Pots per 3 CF Bag
4" square pot	147
1 gallon pot	21
2 gallon pot	10
3 gallon pot	7
5 gallon pot	4

Power Cost Estimation Guide

USE THIS HANDY GUIDE TO FIGURE OUT THE COST OF USING VARIOUS WATT FIXTURES.

POWER CONSUMPTION

On average a light system will increase your electricity cost from $8 to $20 per month—the exact amount depends on the size of the system and the number of hours operated. However, since these grow lights are so energy efficient, you are getting huge amounts of light (and growing power) for your money! Make sure your grow room's power circuit can handle the power draw. For safety reasons, do not exceed 75% of the rated ability of the fuse/breaker (for example: use no more than 15 amps on a 20-amp circuit). To calculate your cost, multiply the bulb wattage X hours of operation and divide by 1000. This figure is the number of kilowatt hours of electricity consumed. (Example: a 400 watt bulb running for 18 hours will use 7.2 kilowatt hours). Check your power bill for the cost of each kilowatt hour. Then multiply the number of kilowatt hours by the cost of a kilowatt hour (K/hr) to arrive at the cost per month to run the light in your area.

96 WATT LIGHTING FIXTURE

POWER COST ESTIMATION GUIDE PER MONTH (ASSUMES 30 DAY MONTH)

COST PER KW/HR	4¢	6¢	8¢	10¢	12¢	14¢	16¢	18¢	20¢	22¢	24¢	26¢
HRS. PER DAY X 30 DAYS	EXAMPLE: 6 HRS X 104 WATTS* ÷ 1000 X $ .04 PER KWH X 30 DAYS = $ .75											
6 HRS X 30 DAYS	$0.75	$1.12	$1.50	$1.87	$2.25	$2.62	$3.00	$3.37	$3.74	$4.12	$4.49	$4.87
8 HRS X 30 DAYS	$1.00	$1.50	$2.00	$2.50	$3.00	$3.49	$3.99	$4.49	$4.99	$5.49	$5.99	$6.49
10 HRS X 30 DAYS	$1.25	$1.87	$2.50	$3.12	$3.74	$4.37	$4.99	$5.62	$6.24	$6.86	$7.49	$8.11
12 HRS X 30 DAYS	$1.50	$2.25	$3.00	$3.74	$4.49	$5.24	$5.99	$6.74	$7.49	$8.24	$8.99	$9.73
14 HRS X 30 DAYS	$1.75	$2.62	$3.49	$4.37	$5.24	$6.12	$6.99	$7.86	$8.74	$9.61	$10.48	$11.36
16 HRS X 30 DAYS	$2.00	$3.00	$3.99	$4.99	$5.99	$6.99	$7.99	$8.99	$9.98	$10.98	$11.98	$12.98
18 HRS X 30 DAYS	$2.25	$3.37	$4.49	$5.62	$6.74	$7.86	$8.99	$10.11	$11.23	$12.36	$13.48	$14.60

*** A 96 watt lighting fixture uses 104 watts per hour. For use with the New Wave® 24, Sun Blaze® 24 and Tek-Light™ 24.**

108 WATT LIGHTING FIXTURE

POWER COST ESTIMATION GUIDE PER MONTH (ASSUMES 30 DAY MONTH)

COST PER KW/HR	4¢	6¢	8¢	10¢	12¢	14¢	16¢	18¢	20¢	22¢	24¢	26¢
HRS. PER DAY X 30 DAYS	EXAMPLE: 6 HRS X 117 WATTS* ÷ 1000 X $ .04 PER KWH X 30 DAYS = $ .84											
6 HRS X 30 DAYS	$0.84	$1.26	$1.68	$2.11	$2.53	$2.95	$3.37	$3.79	$4.21	$4.63	$5.05	$5.48
8 HRS X 30 DAYS	$1.12	$1.68	$2.25	$2.81	$3.37	$3.93	$4.49	$5.05	$5.62	$6.18	$6.74	$7.30
10 HRS X 30 DAYS	$1.40	$2.11	$2.81	$3.51	$4.21	$4.91	$5.62	$6.32	$7.02	$7.72	$8.42	$9.13
12 HRS X 30 DAYS	$1.68	$2.53	$3.37	$4.21	$5.05	$5.90	$6.74	$7.58	$8.42	$9.27	$10.11	$10.95
14 HRS X 30 DAYS	$1.97	$2.95	$3.93	$4.91	$5.90	$6.88	$7.86	$8.85	$9.83	$10.81	$11.79	$12.78
16 HRS X 30 DAYS	$2.25	$3.37	$4.49	$5.62	$6.74	$7.86	$8.99	$10.11	$11.23	$12.36	$13.48	$14.60
18 HRS X 30 DAYS	$2.53	$3.79	$5.05	$6.32	$7.58	$8.85	$10.11	$11.37	$12.64	$13.90	$15.16	$16.43

*** A 108 watt lighting fixture uses 117 watts per hour. For use with the Tek-Light™ 42, New Wave® 42 & Ready Fit® 4 ft.**

150 WATT LIGHTING FIXTURE

POWER COST ESTIMATION GUIDE PER MONTH (ASSUMES 30 DAY MONTH)

COST PER KW/HR	4¢	6¢	8¢	10¢	12¢	14¢	16¢	18¢	20¢	22¢	24¢	26¢
HRS. PER DAY X 30 DAYS	EXAMPLE: 6 HRS X 165 WATTS* ÷ 1000 X $ .04 PER KWH X 30 DAYS = $ 1.19											
6 HRS X 30 DAYS	$1.19	$1.78	$2.38	$2.97	$3.56	$4.16	$4.75	$5.35	$5.94	$6.53	$7.13	$7.72
8 HRS X 30 DAYS	$1.58	$2.38	$3.17	$3.96	$4.75	$5.54	$6.34	$7.13	$7.92	$8.71	$9.50	$10.30
10 HRS X 30 DAYS	$1.98	$2.97	$3.96	$4.95	$5.94	$6.93	$7.92	$8.91	$9.90	$10.89	$11.88	$12.87
12 HRS X 30 DAYS	$2.38	$3.56	$4.75	$5.94	$7.13	$8.32	$9.50	$10.69	$11.88	$13.07	$14.26	$15.44
14 HRS X 30 DAYS	$2.77	$4.16	$5.54	$6.93	$8.32	$9.70	$11.09	$12.47	$13.86	$15.25	$16.63	$18.02
16 HRS X 30 DAYS	$3.17	$4.75	$6.34	$7.92	$9.50	$11.09	$12.67	$14.26	$15.84	$17.42	$19.01	$20.59
18 HRS X 30 DAYS	$3.56	$5.35	$7.13	$8.91	$10.69	$12.47	$14.26	$16.04	$17.82	$19.60	$21.38	$23.17

*** A 150 watt lighting fixture uses 165 watts per hour. For use with the Sun System® 4 & Sun System® HPS 150.**

216 WATT LIGHTING FIXTURE

POWER COST ESTIMATION GUIDE PER MONTH (ASSUMES 30 DAY MONTH)

COST PER KW/HR	4¢	6¢	8¢	10¢	12¢	14¢	16¢	18¢	20¢	22¢	24¢	26¢
HRS. PER DAY X 30 DAYS	EXAMPLE: 6 HRS X 234 WATTS* ÷ 1000 X $ .04 PER KWH X 30 DAYS = $ 1.68											
6 HRS X 30 DAYS	$1.68	$2.53	$3.37	$4.21	$5.05	$5.90	$6.74	$7.58	$8.42	$9.27	$10.11	$10.95
8 HRS X 30 DAYS	$2.25	$3.37	$4.49	$5.62	$6.74	$7.86	$8.99	$10.11	$11.23	$12.36	$13.48	$14.60
10 HRS X 30 DAYS	$2.81	$4.21	$5.62	$7.02	$8.42	$9.83	$11.23	$12.64	$14.04	$15.44	$16.85	$18.25
12 HRS X 30 DAYS	$3.37	$5.05	$6.74	$8.42	$10.11	$11.79	$13.48	$15.16	$16.85	$18.53	$20.22	$21.90
14 HRS X 30 DAYS	$3.93	$5.90	$7.86	$9.83	$11.79	$13.76	$15.72	$17.69	$19.66	$21.62	$23.59	$25.55
16 HRS X 30 DAYS	$4.49	$6.74	$8.99	$11.23	$13.48	$15.72	$17.97	$20.22	$22.46	$24.71	$26.96	$29.20
18 HRS X 30 DAYS	$5.05	$7.58	$10.11	$12.64	$15.16	$17.69	$20.22	$22.74	$25.27	$27.80	$30.33	$32.85

*** A 216 watt lighting fixture uses 234 watts per hour. For use with Tek-Light™ 44, New Wave® 44 & Sun Blaze® 44.**

250 WATT LIGHTING FIXTURE

POWER COST ESTIMATION GUIDE PER MONTH (ASSUMES 30 DAY MONTH)												
COST PER KW/HR	4¢	6¢	8¢	10¢	12¢	14¢	16¢	18¢	20¢	22¢	24¢	26¢
HRS. PER DAY X 30 DAYS	EXAMPLE: 6 HRS X 275 WATTS* ÷ 1000 X $ .04 PER KWH X 30 DAYS = $ 1.98											
6 HRS X 30 DAYS	$1.98	$2.97	$3.96	$4.95	$5.94	$6.93	$7.92	$8.91	$9.90	$10.89	$11.88	$12.87
8 HRS X 30 DAYS	$2.64	$3.96	$5.28	$6.60	$7.92	$9.24	$10.56	$11.88	$13.20	$14.52	$15.84	$17.16
10 HRS X 30 DAYS	$3.30	$4.95	$6.60	$8.25	$9.90	$11.55	$13.20	$14.85	$16.50	$18.15	$19.80	$21.45
12 HRS X 30 DAYS	$3.96	$5.94	$7.92	$9.90	$11.88	$13.86	$15.84	$17.82	$19.80	$21.78	$23.76	$25.74
14 HRS X 30 DAYS	$4.62	$6.93	$9.24	$11.55	$13.86	$16.17	$18.48	$20.79	$23.10	$25.41	$27.72	$30.03
16 HRS X 30 DAYS	$5.28	$7.92	$10.56	$13.20	$15.84	$18.48	$21.12	$23.76	$26.40	$29.04	$31.68	$34.32
18 HRS X 30 DAYS	$5.94	$8.91	$11.88	$14.85	$17.82	$20.79	$23.76	$26.73	$29.70	$32.67	$35.64	$38.61

*** A 250 watt lighting fixture uses 275 watts per hour. For use with Sun System® 1 & 2.**

400 WATT LIGHTING FIXTURE

POWER COST ESTIMATION GUIDE PER MONTH (ASSUMES 30 DAY MONTH)												
COST PER KW/HR	4¢	6¢	8¢	10¢	12¢	14¢	16¢	18¢	20¢	22¢	24¢	26¢
HRS. PER DAY X 30 DAYS	EXAMPLE: 6 HRS X 460 WATTS* ÷ 1000 X $ .04 PER KWH X 30 DAYS = $ 3.31											
6 HRS X 30 DAYS	$3.31	$4.97	$6.62	$8.28	$9.94	$11.59	$13.25	$14.90	$16.56	$18.22	$19.87	$21.53
8 HRS X 30 DAYS	$4.42	$6.62	$8.83	$11.04	$13.25	$15.46	$17.66	$19.87	$22.08	$24.29	$26.50	$28.70
10 HRS X 30 DAYS	$5.52	$8.28	$11.04	$13.80	$16.56	$19.32	$22.08	$24.84	$27.60	$30.36	$33.12	$35.88
12 HRS X 30 DAYS	$6.62	$9.94	$13.25	$16.56	$19.87	$23.18	$26.50	$29.81	$33.12	$36.43	$39.74	$43.06
14 HRS X 30 DAYS	$7.73	$11.59	$15.46	$19.32	$23.18	$27.05	$30.91	$34.78	$38.64	$42.50	$46.37	$50.23
16 HRS X 30 DAYS	$8.83	$13.25	$17.66	$22.08	$26.50	$30.91	$35.33	$39.74	$44.16	$48.58	$52.99	$57.41
18 HRS X 30 DAYS	$9.94	$14.90	$19.87	$24.84	$29.81	$34.78	$39.74	$44.71	$49.68	$54.65	$59.62	$64.58

*** A 400 watt lighting fixture uses 460 watts per hour. For use with Sun System® 1, 2, 3, 6, 10 & Harvest Pro™**

432 WATT LIGHTING FIXTURE

POWER COST ESTIMATION GUIDE PER MONTH (ASSUMES 30 DAY MONTH)												
COST PER KW/HR	4¢	6¢	8¢	10¢	12¢	14¢	16¢	18¢	20¢	22¢	24¢	26¢
HRS. PER DAY X 30 DAYS	EXAMPLE: 6 HRS X 468 WATTS* ÷ 1000 X $ .04 PER KWH X 30 DAYS = $ 3.37											
6 HRS X 30 DAYS	$3.37	$5.05	$6.74	$8.42	$10.11	$11.79	$13.48	$15.16	$16.85	$18.53	$20.22	$21.90
8 HRS X 30 DAYS	$4.49	$6.74	$8.99	$11.23	$13.48	$15.72	$17.97	$20.22	$22.46	$24.71	$26.96	$29.20
10 HRS X 30 DAYS	$5.62	$8.42	$11.23	$14.04	$16.85	$19.66	$22.46	$25.27	$28.08	$30.89	$33.70	$36.50
12 HRS X 30 DAYS	$6.74	$10.11	$13.48	$16.85	$20.22	$23.59	$26.96	$30.33	$33.70	$37.07	$40.44	$43.80
14 HRS X 30 DAYS	$7.86	$11.79	$15.72	$19.66	$23.59	$27.52	$31.45	$35.38	$39.31	$43.24	$47.17	$51.11
16 HRS X 30 DAYS	$8.99	$13.48	$17.97	$22.46	$26.96	$31.45	$35.94	$40.44	$44.93	$49.42	$53.91	$58.41
18 HRS X 30 DAYS	$10.11	$15.16	$20.22	$25.27	$30.33	$35.38	$40.44	$45.49	$50.54	$55.60	$60.65	$65.71

*** A 432 watt lighting fixture uses 468 watts per hour. For use with Tek-Light™ 48, New Wave® 48 & Sun Blaze® 48.**

600 WATT LIGHTING FIXTURE

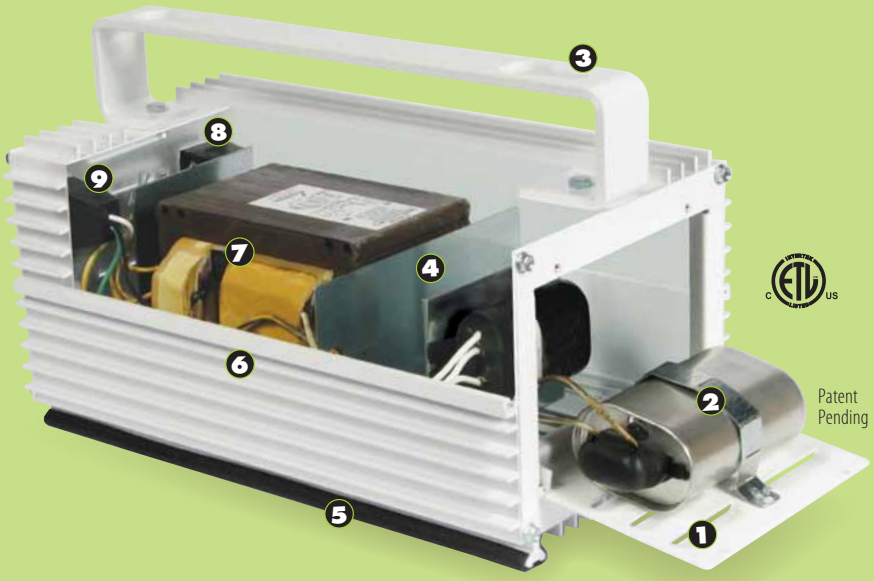
POWER COST ESTIMATION GUIDE PER MONTH (ASSUMES 30 DAY MONTH)												
COST PER KW/HR	4¢	6¢	8¢	10¢	12¢	14¢	16¢	18¢	20¢	22¢	24¢	26¢
HRS. PER DAY X 30 DAYS	EXAMPLE: 6 HRS X 680 WATTS* ÷ 1000 X $ .04 PER KWH X 30 DAYS = $ 4.90											
6 HRS X 30 DAYS	$4.90	$7.34	$9.79	$12.24	$14.69	$17.14	$19.58	$22.03	$24.48	$26.93	$29.38	$31.82
8 HRS X 30 DAYS	$6.53	$9.79	$13.06	$16.32	$19.58	$22.85	$26.11	$29.38	$32.64	$35.90	$39.17	$42.43
10 HRS X 30 DAYS	$8.16	$12.24	$16.32	$20.40	$24.48	$28.56	$32.64	$36.72	$40.80	$44.88	$48.96	$53.04
12 HRS X 30 DAYS	$9.79	$14.69	$19.58	$24.48	$29.38	$34.27	$39.17	$44.06	$48.96	$53.86	$58.75	$63.65
14 HRS X 30 DAYS	$11.42	$17.14	$22.85	$28.56	$34.27	$39.98	$45.70	$51.41	$57.12	$62.83	$68.54	$74.26
16 HRS X 30 DAYS	$13.06	$19.58	$26.11	$32.64	$39.17	$45.70	$52.22	$58.75	$65.28	$71.81	$78.34	$84.86
18 HRS X 30 DAYS	$14.69	$22.03	$29.38	$36.72	$44.06	$51.41	$58.75	$66.10	$73.44	$80.78	$88.13	$95.47

*** A 600 watt lighting fixture uses 680 watts per hour. For use with Sun System® 1, 3, 10 & Harvest Pro™.**

1000 WATT LIGHTING FIXTURE

POWER COST ESTIMATION GUIDE PER MONTH (ASSUMES 30 DAY MONTH)												
COST PER KW/HR	4¢	6¢	8¢	10¢	12¢	14¢	16¢	18¢	20¢	22¢	24¢	26¢
HRS. PER DAY X 30 DAYS	EXAMPLE: 6 HRS X 1100 WATTS* ÷ 1000 X $ .04 PER KWH X 30 DAYS = $ 7.92											
6 HRS X 30 DAYS	$7.92	$11.88	$15.84	$19.80	$23.76	$27.72	$31.68	$35.64	$39.60	$43.56	$47.52	$51.48
8 HRS X 30 DAYS	$10.56	$15.84	$21.12	$26.40	$31.68	$36.96	$42.24	$47.52	$52.80	$58.08	$63.36	$68.64
10 HRS X 30 DAYS	$13.20	$19.80	$26.40	$33.00	$39.60	$46.20	$52.80	$59.40	$66.00	$72.60	$79.20	$85.80
12 HRS X 30 DAYS	$15.84	$23.76	$31.68	$39.60	$47.52	$55.44	$63.36	$71.28	$79.20	$87.12	$95.04	$102.96
14 HRS X 30 DAYS	$18.48	$27.72	$36.96	$46.20	$55.44	$64.68	$73.92	$83.16	$92.40	$101.64	$110.88	$120.12
16 HRS X 30 DAYS	$21.12	$31.68	$42.24	$52.80	$63.36	$73.92	$84.48	$95.04	$105.60	$116.16	$126.72	$137.28
18 HRS X 30 DAYS	$23.76	$35.64	$47.52	$59.40	$71.28	$83.16	$95.04	$106.92	$118.80	$130.68	$142.56	$154.44

*** A 1000 watt lighting fixture uses 1100 watts per hour. For use with Sun System® 1, 3, 6, 10, & Harvest Pro™.**



Sun System® 1 & 6 Ballasts Exclusive Features

Fabricated and assembled in the USA with US and globally sourced parts

5 Year Warranty

Featuring our exclusive EZ CAP™ DOOR for easy capacitor replacement

Featuring our exclusive POWER POINTER™ voltage selector

BALLAST FEATURES

❶ EZ Cap™ Door offers easy access to the capacitor in the event it needs to be replaced—another Sunlight Supply® innovation!

❷ High temperature capacitor insures long lasting durability.

❸ Heavy duty handle for easy carrying or wall hanging.

❹ Cool Wall™ uniquely offers two barrier walls which help keep the critical components cool.

❺ Rubber feet reduce noise & vibration.

❻ Aluminum ballast enclosure is engineered to dissipate heat and keep components cool.

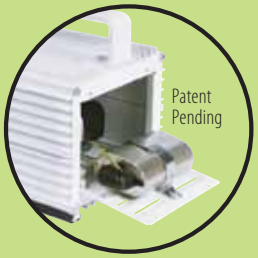
❼ Major brand ballast – we use only the finest quality components available.

❽ Our Exclusive Power Pointer™ easily switches from 120 to 240 volt power! Simply unplug the detachable 120 volt power cord (included), turn the Power Pointer™ arrow down for 240 volt power and plug in a 240 volt power cord. THAT'S IT! (240 volt power cord sold separately).

❾ Lamp cord receptacle – accepts all Sun System® lamp cords (sold separately).

Sun System® 1

Sun System® Exclusive Feature! EZ Cap Door
Patent Pending



Sun System® 6

Sun System® 1 Ballasts

- Major brand ballast.
- Comes standard with an 6' - 120 volt Smart Volt™ powercord. Purchase the 240 volt Smart Volt™ powercord separately (#903082).

Item No.	Description	MSRP
901905	Sun System® 1 MH 400 Watt Ballast	$201.95
901910	Sun System® 1 MH 1000 Watt Ballast	$251.95

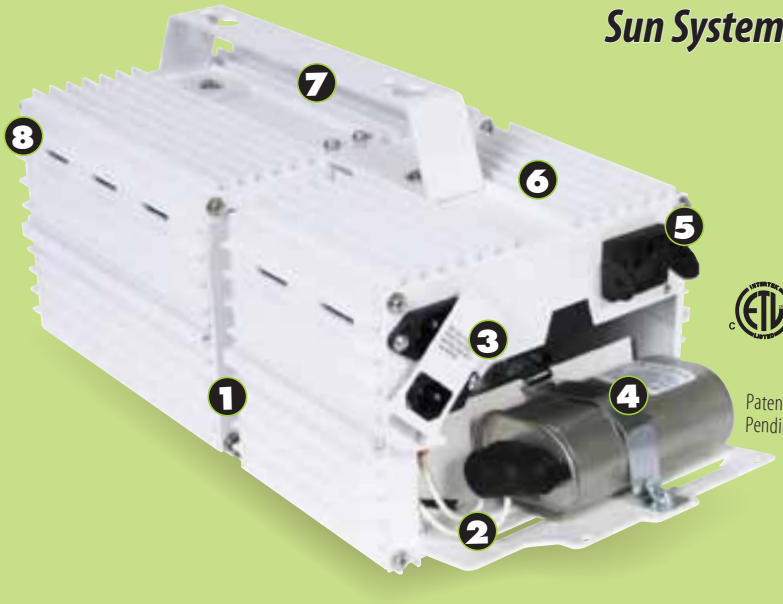
Item No.	Description	MSRP
901925	Sun System® 1 HPS 400 Watt Ballast	$226.95
901935	Sun System® 1 HPS 600 Watt Ballast	$299.95
901940	Sun System® 1 HPS 1000 Watt Ballast	$287.95

Sun System® 6 Switchable Ballasts

- Major brand ballast.
- Comes standard with an 6' - 120 volt Smart Volt™ powercord. Purchase the 240 volt Smart Volt™ powercord separately (#903082).
- This unique ballast has all the features that are incorporated into our Sun System® 1 fixture, but adds the ability to run either MH or HPS lamps from one ballast.
- Changing from one lamp type to the other is easy – simply insert the appropriate lamp and set the switch to the correct operating setting.

Item No.	Description	MSRP
901945	Sun System® 6 - 1000 Watt Switchable Ballast	$307.95

Sun System® Harvest Pro® & Harvest Pro® Elite Ballasts Exclusive Features



Patent Pending

Featuring our exclusive EZ CAP™ DOOR for easy capacitor replacement

5 Year Warranty

Featuring our exclusive POWER POINTER™ voltage selector

Capacitor temperature is 60° - 65° F COOLER than a single compartment ballast

BALLAST FEATURES

❶ Exclusive on the Harvest Pro® Elite – a two compartment ballast keeps critical components cooler than any other ballast on the market. The capacitor and ignitor temperatures are greatly reduced by being in their own compartment separate from the ballast core. Lower temperatures mean better reliability & longer life.

❷ EZ Cap™ Door offers easy access to the capacitor in the event it needs to be replaced—another Sunlight Supply® innovation!

❸ Our Exclusive Power Pointer™ easily switches from 120 to 240 volt power! Simply unplug the detachable 120 volt power cord (included), turn the Power Pointer™ arrow down for 240 volt power and plug in a 240 volt power cord. THAT'S IT! (240 volt power cord sold separately, #903082).

❹ High temperature capacitor ensures long lasting durability.

❺ Lamp cord receptacle – accepts all Sun System® lamp cords (sold separately).

❻ Aluminum ballast enclosure is engineered to dissipate heat and keep components cool.

❼ Heavy duty handle for easy carrying or wall hanging.

❽ Louvered end plates and heat slots help cool the ballast for years of trouble-free use!

Sun System® Harvest Pro® *Elite*

Sun System® Exclusive Feature! EZ Cap Door
Patent Pending

Sun System® Harvest Pro®

Sun System® Harvest Pro® *Elite* Ballasts

Item No.	Description	MSRP
902615	Harvest Pro® Elite MH 400 Watt Ballast	$134.95
902620	Harvest Pro® Elite MH 1000 Watt Ballast	$184.95

Item No.	Description	MSRP
902610	Harvest Pro® Elite HPS 400 Watt Ballast	$166.95
902605	Harvest Pro® Elite HPS 600 Watt Ballast	$202.95
902600	Harvest Pro® Elite HPS 1000 Watt Ballast	$202.95

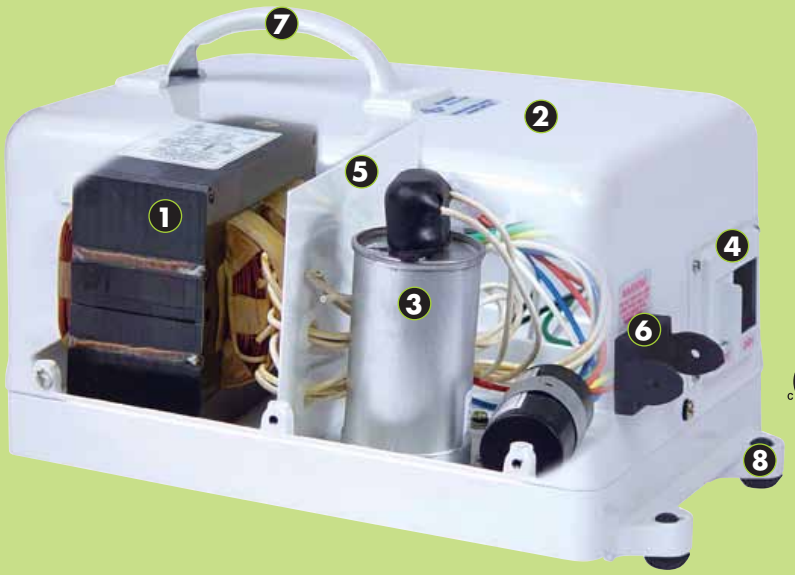
Item No.	Description	MSRP
902433	Harvest Pro® Elite 400 Watt Switchable Ballast	$184.95
902625	Harvest Pro® Elite 1000 Watt Switchable Ballast	$211.95

Sun System® Harvest Pro® Ballasts

Item No.	Description	MSRP
902431	Harvest Pro® MH 400 Watt Ballast	$119.95
902442	Harvest Pro® MH 1000 Watt Ballast	$164.95

Item No.	Description	MSRP
902432	Harvest Pro® HPS 400 Watt Ballast	$147.95
902435	Harvest Pro® HPS 600 Watt Ballast	$182.95
902440	Harvest Pro® HPS 1000 Watt Ballast	$182.95

Item No.	Description	MSRP
902444	Harvest Pro® 400 Watt Switchable Ballast	$164.95
902441	Harvest Pro® 1000 Watt Switchable Ballast	$191.95



Sun System® 10 Ballasts Exclusive Features

EXCLUSIVE POWER SLIDER™ SWITCH FROM 120 TO 240 VOLT WITH EASE

5 Year Warranty

BALLAST FEATURES

1. High quality ballast will insure years of trouble-free use.
2. Aluminum ballast enclosure dissipates heat for maximum reliability. The powder coated finish is attractive and durable.
3. High temperature capacitor insures long lasting durability.
4. Exclusive Power Slider™ - switch from 120 volt to 240 volt with ease. 120 volt cord included. Purchase 240 volt cord separately (#903082).
5. A barrier wall between the ballast and the capacitor/ignitor helps keep the critical components cool.
6. Lamp cord receptacle – accepts all Sun System® lamp cords (sold separately).
7. Heavy duty handle for easy carrying.
8. Rubber feet reduce noise and vibration.

Sun System® 10 Ballasts

While quantities last

Item No.	Description	MSRP
902000	Sun System® 10 MH 400 Watt Ballast	$112.95
902005	Sun System® 10 MH 1000 Watt Ballast	$162.95

Item No.	Description	MSRP
902010	Sun System® 10 HPS 400 Watt Ballast	$144.95
902015	Sun System® 10 HPS 600 Watt Ballast	$172.95
902020	Sun System® 10 HPS 1000 Watt Ballast	$172.95

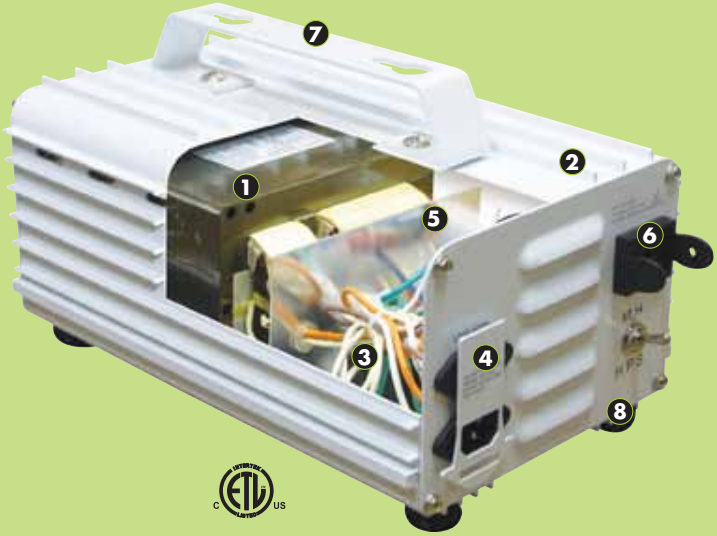
Item No.	Description	MSRP
902022	Sun System® 10 Switchable 400 Watt Ballast	$157.95
902021	Sun System® 10 Switchable 1000 Watt Ballast	$181.95

2 Year Warranty

Sun System® Ready to Grow™ HPS Ballast Kit

Kit includes ballast, major brand high temperature capacitor & ignitor. Quad tap ballast will run on 120, 208, 240 or 277 volt power.

Item No.	Description	MSRP
902446	HPS 1000 - Ready to Grow™ Ballast Kit	$126.95



Sun System® 10 Crop Master Ballasts

NEW! Exclusive Features

Coming Soon
to replace the old style "Sun System 10 Econogro"

5 Year Warranty

Featuring our exclusive POWER POINTER™ voltage selector

BALLAST FEATURES

❶ High quality ballast will insure years of trouble-free use.

❷ Extruded aluminum ballast enclosure dissipates heat for maximum reliability. The powder coated finish is attractive and durable.

❸ High temperature capacitor insures long lasting durability.

❹ Our Exclusive Power Pointer™ easily switches from 120 to 240 volt power! Simply unplug the detachable 120 volt power cord (included), turn the Power Pointer™ arrow down for 240 volt power and plug in a 240 volt power cord. THAT'S IT! (240 volt power cord sold separately, #903082).

❺ A barrier wall between the ballast and the capacitor/ignitor helps keep the critical components cool.

❻ Lamp cord receptacle – accepts all Sun System® lamp cords (sold separately).

❼ Heavy duty handle for easy carrying.

❽ Rubber feet reduce noise and vibration.

Sun System® 10 Crop Master Ballasts

Item No.	Description	MSRP
902030	Crop Master MH 400 Watt Ballast	$114.95
902035	Crop Master MH 1000 Watt Ballast	$164.95

Item No.	Description	MSRP
902040	Crop Master HPS 400 Watt Ballast	$146.95
902045	Crop Master HPS 600 Watt Ballast	$174.95
902050	Crop Master HPS 1000 Watt Ballast	$174.95

Item No.	Description	MSRP
902055	Crop Master Switchable 400 Watt Ballast	$159.95
902060	Crop Master Switchable 1000 Watt Ballast	$182.95

Sun System® Budget Gro™ II Ballast

Featuring our exclusive POWER POINTER™ voltage selector

2 Year Warranty

BALLAST FEATURES

- All new exposed ballast design concept is compact and cool! Separating the ballast from the other components offers superior cooling capabilities while extending the longevity of the capacitor and ignitor.
- Our exclusive Power Pointer™ easily switches from 120 to 240 volt power! Simply unplug the detachable 120 volt power cord (included), turn the Power Pointer™ arrow down for 240 volt power and plug in a 240v power cord. (240 volt power cord sold separately, Part# 903082).
- Lamp cord receptacle – accepts all Sun System® lamp cords. (lamp cords sold separately).
- Stainless steel handles allow easy handling and soft rubber feet provide quiet running if placed on a hard surface.
- Excellent ballast quality will provide years of trouble-free operation.

Sun System® Budget Gro™ II Ballast

Item No.	Description	MSRP
902507	Budget Gro™ II 1000 Watt HPS 120/240 Volt Ballast	$154.95
902508	Budget Gro™ II 1000 Watt Switchable MH/HPS 120/240 Volt Ballast	$160.95
902509	Budget Gro™ II 600 Watt HPS 120/240 Volt Ballast	$154.95

MASTER BLASTER Electronic Ballast

1500 Watt

NEW!

industry exclusive

2 Year Warranty

206,000
Approximate Initial Lumens

BALLAST FEATURES

1. Extruded aluminum housing is engineered to dissipate heat and keep the components cool.
2. Operates on 240 volt power only. Comes standard with 6 foot 240 volt cord.
3. Resettable circuit breaker for short circuit protection.
4. Lamp cord receptacle compatible with all Sun System® reflectors and sockets.
5. Operates both HPS & MH lamps.
6. Completely silent and lightweight.
7. Extremely efficient – 99% power factor.
8. Generator ready.
9. We recommend using a large air-cooled reflector with this ballast & lamp. The Sun System® Magnum XXXL 8" is ideal for this application.

Master Blaster 1500 Watt Lamp

This revolutionary lamp offers an amazing output at 206,000 lumens. This is a very well constructed and robust lamp. 1 year warranty.

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	Case Qty	MSRP
901692	1500	Master Blaster	1500 HPS	206,000	E25	12	$149.95

Master Blaster Electronic Ballast

Item No.	Description	MSRP
902498	Master Blaster Electronic Ballast 1500 Watt – 240 Volt	$499.95

240 SMART VOLT™ POWER CORDS

Item No.	Description	MSRP
903082	240 Volt - Smart Volt™ Cord - 6'	$9.95
903084	240 Volt - Smart Volt™ Cord - 20'	$19.95

902518

Sun System® Galaxy™ Select-A-Watt™ Electronic Ballast

NEW!

5 Year Warranty
3 Year Full, 2 Year Pro-Rated

Sun System® Galaxy™ Select-A-Watt™ Electronic Ballast

Item No.	Description	MSRP
902475	Galaxy™ 150 - 175 - 250 - HQI Select-A-Watt™/ Dimmable Electronic Ballast – 120/240 Volt	$157.95
902483	Galaxy™ 250 - HQI - 400 - Turbo Charge Select-A-Watt™/ Dimmable Electronic Ballast – 120/240 Volt	$181.95
902518	Galaxy™ 400 - 600 - 1000 - Turbo Charge Select-A-Watt™/ Dimmable Electronic Ballast – 120/240 Volt	$399.95

120 & 240 SMART VOLT™ POWER CORDS

Item No.	Description	MSRP
903081	120 Volt - Smart Volt™ Cord - 6'	$6.95
903082	240 Volt - Smart Volt™ Cord - 6'	$9.95
903083	120 Volt - Smart Volt™ Cord - 20'	$16.95
903084	240 Volt - Smart Volt™ Cord - 20'	$19.95

902518: This state-of-the-art ballast is manufactured to provide today's serious grower with maximum flexibility & performance. The Galaxy™ Select-a-Watt™ is different than any other "dimmable" electronic ballast on the market. The Galaxy™ brand name carries a strong reputation of reliability and performance. There are three ways to use the Select-a-Watt™ feature:

- It will properly drive a 400, 600 or 1000 watt lamp to ANSI specifications. For example: Set the switch to 400 watts, insert a 400 watt lamp into your socket and the ballast will operate the 400 watt lamp. The ballast will similarly operate 600 or 1000 watt lamps.
- The second option for this ballast is dimming a 1000 watt lamp. Adjust the switch to 400 or 600 watts and the ballast will dim the 1000 watt lamp by 40 or 60%.
- The Turbo Charge feature will increase the output of a 1000 watt lamp (only) by approximately 10%. You will achieve peak performance, but this may decrease your lamp life.

Lamps are only dimmable on wattages lower than the specified lamp wattage. A 1000 watt lamp can be dimmed down to 600 watt or 400 watt. A 600 watt lamp can be dimmed down to 400 watt, but cannot be over-driven to 1000 watts.

Turbo Charge is designed for 1000 watt lamps only. Do not use with 400 watt or 600 watt lamps. This can be hazardous.

902483: This Galaxy ballast will operate a 250 or 400 watt lamp. The Turbo Charged feature can only be used with a 400 watt lamp.

902475: This model will operate a 150, 175 or 250 watt lamp. The Turbo Charged feature can only be used with a 250 watt lamp.

Sun System® Galaxy™ Electronic Ballasts

5 Year Warranty
3 Year Full, 2 Year Pro-Rated

BALLAST FEATURES

❶ Extruded aluminum housing is engineered to dissipate heat and keep the components cool.

❷ Smart Volt™ feature allows ballast to run on 120, 208 or 240 volt power. Detachable power cord allows easy change over. Comes standard with 120 volt cord, purchase 240 volt cord separately (Part #903082).

❸ Resettable circuit breaker for short circuit protection.

❹ Lamp cord receptacle compatible with all Sun System® reflectors and sockets.

❺ Operates both HPS & MH lamps.

❻ Completely silent and lightweight.

❼ Extremely efficient – 99% power factor.

❽ Generator ready.

Sun System® Galaxy™ Electronic Ballasts

Item No.	Description	MSRP
902487	Galaxy™ 150 Watt Electronic Ballast – 120/240 Volt	$147.95
902490	Galaxy™ 250 Watt Electronic Ballast – 120/240 Volt	$157.95
902480	Galaxy™ 400 Watt Electronic Ballast – 120/240 Volt	$181.95
902485	Galaxy™ 600 Watt Electronic Ballast – 120/240 Volt	$237.95
902515	Galaxy™ 1000 Watt Electronic Ballast– 120/240 Volt	$399.95
902510	Galaxy™ 1000 Watt Electronic Ballast– **240 Volt**	$389.95

Sun System® Galaxy™ Dual Electronic Ballasts

Item No.	Description	MSRP
902488	Galaxy™ DUAL 150 Watt Electronic Ballast – 120/240V	$234.95
902495	Galaxy™ DUAL 250 Watt Electronic Ballast – 120/240V	$259.95

120 & 240 SMART VOLT™ POWER CORDS

Item No.	Description	MSRP
903081	120 Volt - Smart Volt™ Cord - 6′	$6.95
903082	240 Volt - Smart Volt™ Cord - 6′	$9.95
903083	120 Volt - Smart Volt™ Cord - 20′	$16.95
903084	240 Volt - Smart Volt™ Cord - 20′	$19.95

400 Watt Ballast Powers 250 & 400 Watt Lamps

600 Watt Ballast Powers 400 & 600 Watt Lamps

750 Watt Ballast Powers 600 & 750 Watt Lamps (HPS only)

1000 Watt Ballast Powers 600, 750 & 1000 Watt Lamps

Lumatek™ Electronic Ballasts

5 Year Warranty
3 Year Full, 2 Year Pro-Rated

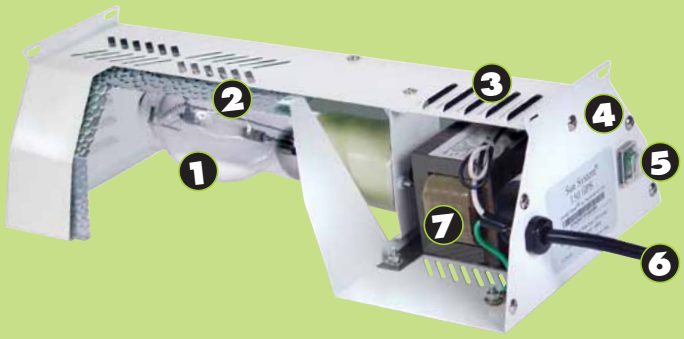
Lumatek™ Electronic Ballasts

Item No.	Description	MSRP
902520	Lumatek 250W Dual-Voltage HPS/MH with Super Lumens	$164.95
902525	Lumatek 250W/400W Dual-Voltage HPS/MH Dial-A-Watt Dimmable	$189.95
902537	Lumatek 400W/600W Dual-Voltage HPS/MH Dial-A-Watt Dimmable	$249.95
902540	Lumatek 400W/600W 240V HPS/MH Dial-A-Watt Dimmable	$239.95
902545	Lumatek Dual 400W/600W 240V HPS/MH Dial-A-Watt Dimmable	$445.95
902550	Lumatek 600W/750W 240V HPS Dial-A-Watt Dimmable	$294.95
902562	Lumatek 600W/750W/1,000W Dual-Voltage HPS/MH Dial-A-Watt Dimmable	$399.95
902560	Lumatek 600W/750W/1,000W 240V HPS/MH Dial-A-Watt Dimmable	$389.95

BALLAST FEATURES

- Dimmable - Ballast can be dimmed to 50%.
- Multi-Wattage - Power different wattage lamps on the same ballast.
- Super Lumens - Up to 10% more light at the flip of a switch.
- Dual-Voltage - Will operate on both 120 Volt or 240 Volt power.
- Can strike lamps up to 65′ from ballast and even at longer distances when used with a Lumatek long range igniter.
- 3 years full + 2 years pro-rated warranty.
- Internal resin coating protects components for long life.
- External breaker system protects against power surges.
- Completely silent.
- Compatible with Smart Volt™ power cords.

Sun System® HPS 150 Grow Light Fixture



FIXTURE FEATURES

1. 150 watt high pressure sodium bulb (mogul base) included – delivers an amazing 16,000 lumens! The color spectrum is ideal for indoor growing.
2. Highly reflective aluminum insert.
3. Vented housing helps dissipate heat.
4. Durable white powder coated finish.
5. Backlit on/off switch.
6. 7' grounded 120 volt power cord.
7. Excellent quality ballast will provide years of trouble-free use.

This light fixture was designed in our state-of-the-art research and development facility located in Vancouver, WA USA.

Sun System® HPS 150

This compact easy to use light fixture will work great for any gardener. The high intensity bulb provides the output and color spectrum required for successful indoor gardening. Grow herbs, flowers or fresh vegetables all year, not just in summer. Dimensions: 15" x 4½" x 7¼".

Item No.	Description	MSRP
900490	Sun System® HPS 150 with Ultra Sun lamp	$89.95

Item No.	Replacement Lamp	MSRP
901510	HPS 150 – Major brand	$23.95
901523	HPS 150 – Ultra Sun	$18.95
901533	MH 150 Conversion – Ultra Sun	$29.95

Sun System® 2

5 Year Warranty

Shown with optional lamps
Patent Pending

Sun System® 4

Sun System® 2 Features

- Steel powder coated housing.
- Highly reflective European aluminum interior.
- 8 foot grounded power cord.
- Backlit on/off switch.
- Chrome wire mounting hangers.
- Mogul base socket.
- Air-cooled with optional fittings.
- Accepts optional glass.
- Purchase your choice of lamps separately.
- 120 Volt.
- Dimensions: 22½" Long x 12¾" Wide x 7½" Tall.

Sun System® 2 Fixtures

While quantities last

Item No.	Description	Base	MSRP
900502	Sun System® 2 - MH 250 Watt	Mogul	$179.95
900507	Sun System® 2 - MH 400 Watt	Mogul	$182.95
900512	Sun System® 2 - HPS 250 Watt	Mogul	$186.95
900517	Sun System® 2 - HPS 400 Watt	Mogul	$189.95

Sun System® 2 *Switchable* Fixtures NEW!

Item No.	Description	Base	MSRP
900503	Sun System® 2 - 250 Watt Switchable	Mogul	$189.95
900504	Sun System® 2 - 400 Watt Switchable	Mogul	$199.95

Sun System® 4 Features

- Energy efficient - but delivers the high output that H.I.D. lights provide. MH 175 = 13,500 lumens/HPS 150 = 16,000 lumens (Note: as a reference point - a 100 watt incandescent lamp emits 1,260 lumens).
- Steel powder coated housing.
- 8 foot grounded power cord.
- Chrome wire mounting hangers.
- 95% reflective European aluminum interior.
- Accepts optional glass.
- Please Note: This fixture uses only medium base lamps.
- 120 Volt.
- Dimensions: 15" Long x 9½" Wide x 5¾" Tall.

Sun System® 4 Fixtures

Item No.	Description	Base	MSRP
900551	Sun System® 4 - MH 175 Watt	Medium	$149.95
900552	Sun System® 4 - HPS 150 Watt	Medium	$149.95

Sun System® 2 & 4 Accessories

Item No.	Description	MSRP
904325	Sun System® 2 Glass	$19.95
904320	Sun System® 4 Glass	$13.95
904020	Universal Air-Cooled - 4" Fitting	$6.95/ea

Sun System® — the highest quality and best performing reflectors available on the market.

Shown with optional lamp

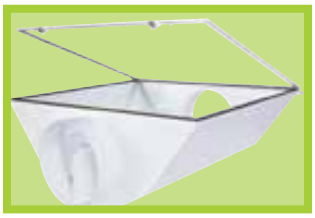
NEW: See how we make a Cool Sun on YouTube
Go to www.youtube.com and search "Sun System Cool Sun".

❶ Commercial grade! Galvanized steel housing with a durable powder coated finish.

❷ Many Sun System® Reflectors include tempered glass, a built-in socket and lamp cord.

❸ Aerodynamic EZ-Breeze™ junction box allows for maximum air flow over the lamp.

❹ These Sun System® reflectors have maximum output, uniformity and diffusion properties by using 95% reflective European aluminum inserts.



❺ Completely sealed! Features hinged tempered glass that closes onto rubber gaskets. Prevents CO2 from being drawn out of a CO2 enriched environment.

❻ 6", 8" or 10" integrated air-cooled fittings allow for extremely efficient cooling.

❼ Fabricated and assembled in the USA with US and globally sourced parts.

❽ Sun System® Reflectors are built to last. We back our reflectors with a 5 year warranty.

Note: Product features vary by reflector. See our reflector Quick Reference Guide in this section for specifics by reflector.

Helpful Hint: Clean the highly reflective German aluminum reflector insert with warm water & mild dish soap only. Do not use any other cleaners or you will damage the reflective surface.

What goes into making a Sun System® brand lighting fixture?

Sunlight Supply®, Inc. is the industry's only vertically integrated manufacturer.

We use only the finest quality materials available to manufacture our products. Our premium quality and exacting standards have helped us build the Sun System® brand to what it is today. We are dedicated to providing our customers with the industry's best hobby and commercial horticultural lighting fixtures.

❶ 3-D C.A.D. DESIGN

Our expertise in C.A.D. design, machine capability and tooling requirements make for prompt product design and development. Sophisticated photometric software ensures proper light dispersion.

❷ PUNCHING CNC

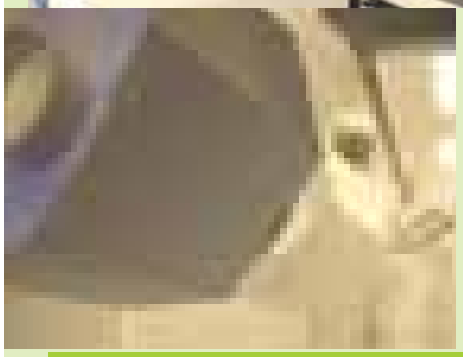
Trumpf computer numerically controlled (CNC) punch presses are used to process steel and aluminum sheet metal for our reflectors & housings.

❸ PART BENDING (BRAKING/FORMING)

6 Trumpf CNC press brakes are used to bend and form flat sheet metal. Exact tolerances of these new machines ensures bend tolerances to within 1/10 of 1% on every angle.

❹ RIVETING AND PEMMING

Automatic feed riveting machines securely attach metal parts together. The Auto-Sert machine inserts Pem Bolts and Pem Nuts on various fixtures.



❺ POWDER COATING

Our reflectors and ballast housings have a powdercoated finish. The electrostatic process applies the powder, usually white, black, blue or green, to a part. Powdercoating is far more durable and corrosion resistant than liquid paint.

The part is hung from a conveyor line entering a 5 stage wash where heated and chemically treated water cleans the part.

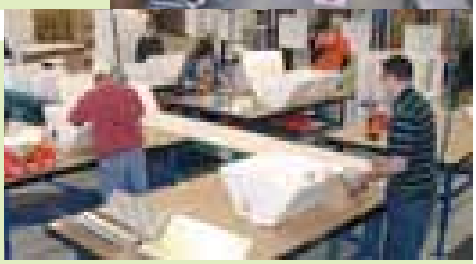
The cleaned part is dried and then enters a spray booth where the powder is applied. 8 guns shoot powder from different angles to completely cover the part. Human touch-up is done at the end of the spray booth.

The part enters a combination oven which uses infra-red and convection heat to cure the powder onto the part. After, it enters a "cool down" area prior to handling.

Visit YouTube and search Sun System Cool Sun to see how a reflector is manufactured.

❻ ASSEMBLY

Strict procedures are adhered to during the assembly of our reflectors, H.I.D. and fluorescent lighting fixtures. ETL frequently inspects our facilities to ensure compliance with their high standards.



❼ TESTING & QUALITY CONTROL

All Sunlight Supply® fixtures are tested 4 ways. Every fixture is test-fired twice from 2 different people. It must pass a hi-pot test for grounding, electrical leakage and a di-electric test. The overall product is reviewed for fit and finish, labeling, all fasteners are tight, sockets secure, etc.

❽ PACKAGING & SHIPPING

A conveyor line moves assembled products from the assembly stations to the packaging area. The quality control area serves as the final product inspection point prior to the items being packaged. After being boxed, the products are palletized and shipped to our distribution centers.

❾ WATCH IT BEING MADE ON YouTube

To see how a Cool Sun is made, go to www.youtube.com and search "Sun System Cool Sun."

	SUN SYSTEM® REFLECTORS		COMPETITOR'S CHINESE IMPORT REFLECTORS	
OURS	MADE IN USA	Proudly fabricated in the USA by American workers in our state-of-the-art factory using computer controlled equipment. See www.sunlightsupply.com and click on manufacturing. ✓	Made in China using antiquated stamping equipment that is NOT computer controlled. They cannot match our quality.	MADE IN CHINA
	95%	Reflector is made of 95% reflective European aluminum! ✓	Reflector is made from a cheap look-a-like material that is only 86% reflective.	86%
	LONGEVITY	Galvanized steel body is rust & corrosion resistant. ✓	Cold rolled steel is more likely to rust & corrode.	RUST
	BUY THE BEST	Support the innovator in horticultural lighting. We have been the leader in new designs & technology in the industry for years. ✓	The imitator - our competitors have copied our product designs and features & sent them to China to be reproduced.	CHEAP KNOCK-OFF
	DUPONT	DuPont brand powder coated finish will provide years of protection. ✓	Poor quality, inconsistent finish - compare for yourself.	BRAND-X
	LEVITON®	Our reflectors exclusively use a Leviton brand 5kv socket. ✓	Competitor's socket is a "foreign-made" unknown brand.	NO NAME BRAND SOCKET

THEIRS

Reflector Quick Reference Guide

Description	Part #	Integrated Air Cooled Fittings	Air Cooled Adaptable	Built in Socket & Lamp Cord	Glass	Glass Part #	Glass Size	Glass Retention	Reflectivity	Lamp Position	Assembly Required	Fabricated in USA	Pallet Count	Reflector Weight	Reflector Dimensions Long x Wide x High
BlockBuster 6″	904650	Yes - 6″	N/A	Yes	Included	904660	25 x 25 x ⅛	Hinged	95%	Horizontal	No	Yes	–	19.5	25½″ x 25½″ x 10″
BlockBuster 8″	904655	Yes - 8″	N/A	Yes	Included	904660	25 x 25 x ⅛	Hinged	95%	Horizontal	No	Yes	–	19.5	25½″ x 25½″ x 10″
Cool Sun	904150	Yes - 6″	N/A	Yes	Included	904140	19⅞ x 23½ x ⅛	Hinged	95%	Horizontal	No	Yes	15	22	20⅛″ x 23½″ x 8¼″
Cool Sun XL	904155	Yes - 8″	N/A	Yes	Included	904140	19⅞ x 23½ x ⅛	Hinged	95%	Horizontal	No	Yes	12	23.6	20⅛″ x 23½″ x 9½″
Super Sun 2	904300	Yes - 6″	N/A	Yes	Included	904305	22¼ x 13 x ⅛	Hinged	95%	Horizontal	No	Yes	21	15.1	22½″ x 13¼″ x 8″
Yield Master II 6″ - Supreme	904382	Yes - 6″	N/A	Yes	Included	904400	21⅞ x 18 3/16 x ⅛	Retention Bars	95%	Horizontal	No	Yes	15	14.8	22½″x 18½″ x 7¼″
Yield Master II 6″ - Classic	904425	Yes - 6″	N/A	Yes	Included	904400	21⅞ x 18 3/16 x ⅛	Retention Bars	86%	Horizontal	No	No	24	11.8	22½″x 18½″ x 7¼″
Yield Master 8″	904640	Yes - 8"	N/A	Yes	Included	904400	21⅞ x 18 3/16 x ⅛	Retention Bars	86%	Horizontal	No	No	15	15.3	22½″x 18½″ x 9″
Yield Master 10″	904645	Yes - 10"	N/A	Yes	Included	904400	21⅞ x 18 3/16 x ⅛	Retention Bars	86%	Horizontal	No	No	12	16.3	22½″x 18½″ x 11″
Great White - 6″	904500	Yes - 6″	N/A	Yes	Included	904510	32 x 26⅛ x ⅛	Retention Bars	90.5%	Horizontal	No	Yes	8	25	32″ x 26″ x 7¾″
Magnum XXXL - 6″	904520	Yes - 6″	N/A	Yes	Included	904510	32 x 26⅛ x ⅛	Retention Bars	95%	Horizontal	No	Yes	10	33.4	32½″ x 26¼″ x 7¾″
Magnum XXXL - 8″	904515	Yes - 8″	N/A	Yes	Included	904512	33⅞ x 29⅛ x ⅛	Retention Bars	95%	Horizontal	No	Yes	8	38.2	38½″ x 29½″ x 9½″
Sun Tube - 6″	904315	Yes - 6″	N/A	Socket	N/A	N/A	N/A	N/A	86%	Hor or Vert	No	No	40	10.7	27″ Long x 6″ Dia
Fresca Sol Light System	904590	No	Water	Yes	N/A	N/A	N/A	N/A	N/A	Horizontal	Yes	Yes	–	12 Dry	N/A
Fresca Sol - Wing	904595	No	N/A	N/A	N/A	N/A	N/A	N/A	95%	Horizontal	No	Yes	–	0.5	19¾" x 14¼" x 4½"
Fresca Sol - Magnum	904610	No	N/A	N/A	N/A	N/A	N/A	N/A	95%	Horizontal	Yes	Yes	–	2.7	34¼" x 29" x 7¾"
Large Convertible	902740	No	Yes	No	Available	902745	23 13/16 x 23 13/16 x ⅛	Retention Bars	95%	Horizontal	No	Yes	12	13	24½" x 24" x 11"
Super Sun	904000	No	Yes	Yes	Included	904010	20 15/16 x 11¼ x ⅛	Integrated Bracket	95%	Horizontal	No	Yes	45	7.1	21½″ x 11½″ x 6¾″
Yield Master II - 4″ - Classic	904370	No	Yes	Yes	Available	904398	20⅝ x 18½ x ⅛	Integrated Bracket	86%	Horizontal	No	No	24	9.8	20¼″ x 21″ x 7½″
Agrotech	904450	No	No	Yes	N/A	N/A	N/A	N/A	95%	Horizontal	Yes	No	72	4.3	22″ x 21⅝″ x 6¼″
Agrotech - Magnum	904615	No	No	Yes	N/A	N/A	N/A	N/A	95%	Horizontal	Yes	Yes	–	6.1	31¼" x 29" x 8½"
Vertizontal	904060	No	No	No	N/A	N/A	N/A	N/A	86%	Horizontal	Yes	Yes	48	8.8	46″ Dia x 10″ High
Silver Sun	904620	No	No	Yes	N/A	N/A	N/A	N/A	95%	Horizontal	Yes	Yes	48	9.8	49" x 49" x 8"
Econowing	904465	No	No	Yes	N/A	N/A	N/A	N/A	86%	Horizontal	No	No	80	4.8	21¼″ x 15″ x 4½″
Value Wing	904467	No	No	Socket	N/A	N/A	N/A	N/A	86%	Horizontal	Yes	No	–	2	18½″ x 13½″ x 5¾″
Parabolic - 48″	904110	No	No	No	N/A	N/A	N/A	N/A	86%	Vertical	Yes	No	100	6.4	48" Dia
Parabolic - 32″	904115	No	No	No	N/A	N/A	N/A	N/A	86%	Vertical	Yes	No	100	3.5	32" Dia
Cone - 42″	904120	No	No	No	N/A	N/A	N/A	N/A	86%	Vertical	Yes	No	100	4.7	42" Dia
Adjust a Wing - Medium	904535	No	No	Yes	N/A	N/A	N/A	N/A	95%	Horizontal	Yes	Yes	72	4.7	22″ x 24″ to 27″
Adjust a Wing - Medium - No Cord	904545	No	No	Socket	N/A	N/A	N/A	N/A	95%	Horizontal	Yes	Yes	72	3.2	22″ x 24″ to 27″
Adjust a Wing - Large	904540	No	No	Yes	N/A	N/A	N/A	N/A	95%	Horizontal	Yes	Yes	36	7.2	28″ x 36″ up to 40″
Adjust a Wing - Large - No Cord	904550	No	No	Socket	N/A	N/A	N/A	N/A	95%	Horizontal	Yes	Yes	36	5.7	28″ x 36″ up to 40″

Air-Cooled Reflectors

Item No.	Description	MSRP
904650	BlockBuster™ Reflector - 6"	$174.95
904660	Replacement BlockBuster™ Glass	$22.95

- Square shape is perfect for square growing areas.
- Very uniform, square, intense light pattern.
- 6" integrated air-cooled fittings.
- Interior made from 95% reflective European aluminum.
- Completely sealed with neoprene gaskets and hinged glass.
- Pre-wired with lamp cord and socket.
- Galvanized steel housing with Dupont powder coated finish.

BlockBuster™ Reflector – 6" Air-Cooled

Item No.	Description	MSRP
904655	BlockBuster™ Reflector - 8"	$182.95
904660	Replacement BlockBuster™ Glass	$22.95

- Square shape is perfect for square growing areas.
- Very uniform, square, intense light pattern.
- 8" integrated air-cooled fittings.
- Interior made from 95% reflective European aluminum.
- Completely sealed with neoprene gaskets and hinged glass.
- Pre-wired with lamp cord and socket.
- Galvanized steel housing with Dupont powder coated finish.

BlockBuster™ Reflector – 8" Air-Cooled

Item No.	Description	MSRP
904150	Cool Sun Reflector® - 6"	$157.95
904140	Replacement Cool Sun Glass	$21.95
904810	Cool Sun A/C Internal Block Covers	$12.95

- Completely sealed with neoprene gasket and hinged glass.
- 6" integrated air-cooled fittings.
- Galvanized steel with Dupont powder coating.
- US Patent No's: D543652, D544136.

Cool Sun Reflector® – 6" Air-Cooled

Item No.	Description	MSRP
904155	Cool Sun XL Reflector® - 8"	$157.95
904140	Replacement Cool Sun XL Glass	$21.95
904805	Cool Sun XL A/C Internal Block Covers	$12.95

- Completely sealed with neoprene gasket and hinged glass.
- 8" integrated air-cooled fittings.
- Galvanized steel with Dupont powder coating.

Cool Sun XL Reflector® – 8" Air-Cooled

Item No.	Description	MSRP
904300	Super Sun® 2 - 6" Air-Cooled Reflector	$141.95
904305	Replacement Super Sun® 2 Glass	$18.95

- Design is based on our high performance, original Super Sun® Reflector.
- Completely sealed with neoprene gasket and hinged glass.
- 95% reflective European aluminum interior for excellent output and uniformity.
- 6" integrated air-cooled fittings.
- Galvanized steel with Dupont powder coating.
- US Patent No: D544987.

Super Sun® 2 Reflector – 6" Air-Cooled

Item No.	Description	MSRP
904645	Yield Master™ 10" Reflector	$139.95
904400	Replacement Yield Master™ - Glass	$21.95

- Completely sealed! Heavy-duty gasket makes the Yield Master airtight.
- Includes tempered glass, built-in socket and 15' lamp cord.
- Highly reflective European aluminum interior for excellent output and uniformity.
- Maximum air-cooling with built-in 10" fittings.
- Durable white powder coated finish.
- EZ-Breeze™ aerodynamic junction box improves airflow and cooling.
- Lamp cord and socket are built into reflector.
- Glass retention bars hold glass firmly in place.

Yield Master™ 10" Reflector

All the reflectors above are shown with optional lamps

Air-Cooled Reflectors

Yield Master™ 8" Reflector

Item No.	Description	MSRP
904640	Yield Master™ 8" Reflector	$129.95
904400	Replacement Yield Master™ - Glass	$21.95

- Completely sealed! Heavy-duty gasket makes the Yield Master airtight.
- Includes tempered glass, built-in socket and 15' lamp cord.
- Highly reflective European aluminum interior for excellent output and uniformity.
- Maximum air-cooling with built-in 8" fittings.
- Durable white powder coated finish.
- EZ-Breeze™ aerodynamic junction box improves airflow and cooling.
- Lamp cord and socket are built into reflector.
- Glass retention bars hold glass firmly in place.

Yield Master™ II – 6" *Supreme* Reflector

Item No.	Description	MSRP
904382	Yield Master™ - 6" Supreme Reflector	$119.95
904400	Replacement Yield Master™ - Glass	$21.95
904800	A/C Internal Block Covers	$12.95

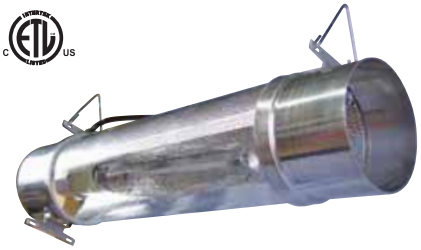
- Completely sealed – features gasketed glass and integrated restraint bars to hold glass tightly in place.
- 95% reflective European aluminum interior for excellent output and uniformity.
- 6" integrated air-cooled fittings.
- Galvanized steel with Dupont powder coating.

Yield Master™ II – 6" *Classic* Reflector

Item No.	Description	MSRP
904425	Yield Master™ II - 6" Classic Reflector	$101.95
904400	Replacement Yield Master™ Glass	$21.95
904800	A/C Internal Block Covers	$12.95

- Completely sealed – features gasketed glass and integrated restraint bars to hold glass tightly in place.
- 86% reflective European aluminum interior for excellent output and uniformity.
- Maximum air cooling with built-in 6" fittings.
- Durable white powder coated finish.

Sun Tube™ 6" Reflector

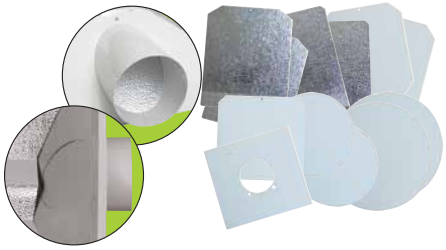


Item No.	Description	MSRP
904315	Sun Tube™ Reflector - 6" Air-cooled	$131.95
904316	Sun Tube™ - 6" Wings	$26.95

- Completely assembled and ready for installation.
- Highly reflective European aluminum reflector offers excellent output and diffusion.
- Unique brackets allow for either horizontal or vertical hanging.
- Glass 19½" Long – overall Length is 27" long by 6" Diameter.

All the reflectors above are shown with optional lamps

Air-Cooled Reflector Internal Block Covers



Item No.	Description	MSRP
904800	Yield Master™ 6" A/C Internal Block Covers-Pair	$12.95
904805	Cool Sun XL A/C Internal Block Covers-Pair	$12.95
904810	Cool Sun A/C Internal Block Covers-Pair	$12.95
904815	Magnum 6" A/C Internal Block Covers-Pair	$12.95
904820	Magnum 8" A/C Internal Block Covers-Pair	$12.95
904825	Great White® A/C Internal Block Covers-Pair	$12.95

Our new A/C block covers are installed in your Sun System® air-cooled reflectors to block off the 6" or 8" fittings in the event that you do not want to air-cool the reflector. They keep light from escaping out the fittings. They are easily attached into our recently modified reflectors. Kit includes a pair of block covers.

Lamp & Reflector Cleaning Cloth

Item No.	Description	MSRP
901475	Lamp & Reflector Cleaning Cloth	$2.49

All light bulbs need to be wiped clean of finger prints after installation. Our micro fiber lamp cleaning cloth is perfect for doing this. Removes finger prints and dust from lamps, glass, light fixtures, etc.

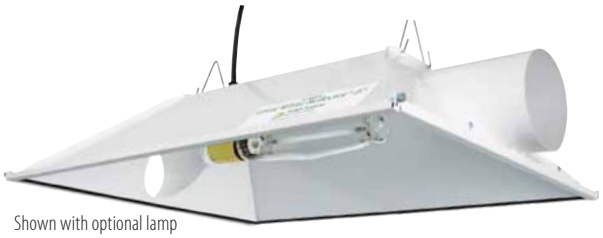
- Individually packaged
- Size: 16" x 16"
- Streak free
- Scratch free
- Lint free
- Ultra soft

Air-Cooled Reflectors

- The largest reflectors in the industry.
- Completely sealed—Featuring gasketed glass and integrated retention bars to hold glass tightly in place.
- Maximum air cooling with built-in fittings.
- Includes tempered glass, built-in socket and 15 ft lamp cord.
- EZ-Breeze™ aerodynamic junction box improves airflow and cooling.

Patent Pending

Shown with optional lamp & 95% reflective insert (#904508)



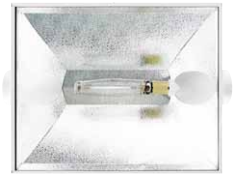
Shown with optional lamp

Item No.	Description	MSRP
904500	Great White® - 6" Air-Cooled Reflector	$199.95
904508	95% Reflective Silver Restrike Panel	$19.95
620112	Replacement White Restrike Panel	$15.95
904510	Replacement Great White® - 6" Glass	$24.95
904825	Great White A/C Internal Block Covers	$12.95

Great White® – 6" Air-Cooled Reflector

- Reflector dimensions: 32" long x 26" wide x 7¾" tall.
- Top panel is interchangeable. Comes standard with white panel. Shown with optional 95% reflective insert (#904508).
- Lightweight aluminum body.
- Exclusive 90.5% reflective Dupont® white powder coating for excellent output and diffusion.
- Maximum air cooling with built-in 6" fittings.

Patent Pending

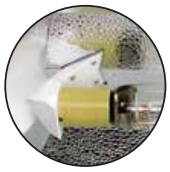


Shown with optional lamp

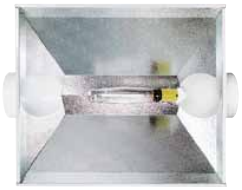
Item No.	Description	MSRP
904520	Magnum XXXL - 6" Air-Cooled Reflector	$232.95
904510	Replacement Magnum XXXL - 6" Glass	$24.95
904815	Magnum XXXL A/C Internal Block Covers 6"	$12.95

Magnum XXXL – 6" Air-Cooled Reflector

- Reflector dimensions: 32½" long x 26¼" wide x 7¾" tall.
- 95% reflective European aluminum interior offers excellent reflectivity and diffusion.
- Powder-coated galvanized steel body.
- Maximum air cooling with built-in 6" fittings.



Patent Pending



The "Ocho"

Shown with optional lamp

Item No.	Description	MSRP
904515	Magnum XXXL - 8" Air-Cooled Reflector	$266.95
904512	Replacement Magnum XXXL - 8" Glass	$27.95
904820	Magnum XXXL A/C Internal Block Covers 8"	$12.95

Magnum XXXL – 8" Air-Cooled Reflector

- Reflector dimensions: 38½" long x 29½" wide x 9½" tall.
- Powder-coated galvanized steel body.
- 95% reflective European aluminum interior offers excellent reflectivity and diffusion.
- Maximum air cooling with built-in 8" fittings.

Water Cooled Light System & Reflectors

Item No.	Description	MSRP
904590	Fresca Sol™ Light System	$274.95

This system consists of a double wall glass vessel with brackets, socket and 15 foot Sun System® lamp cord.

Water-Cooled vs. Air-Cooled?

Air-cooled lights work great with cool air, but become less efficient when outside air temperatures become warmer.

The Fresca Sol™ Water-Cooled Light Fixture keeps your room cool all year long and is more energy efficient to run. It takes a lot less energy to cool your lighting fixture with water than with air, therefore lowering your electric bills.

- Water-cooling allows placement of lighting as close as 6" above plants instead of 18" to 24" with air-cooled systems— resulting in 9 to 16 times more light for your plants!
- Made with high-temperature borosilicate glass.
- Easy access door with thumbscrews allows for easy lamp replacement.
- Universal hanging bracket allows attachment of 2 optional reflectors.
- Accommodates 250, 400, 600 or 1000 HPS lamps.250 or 400 MH lamps–tubular jacket only (no BT-37 or 56 lamps).

Complete Fresca Sol™ Light System

Shown with optional lamp

- ATTENTION: Minimum 50-gallon reservoir needed per 1000-watt fixture. Smaller reservoir can be used if using a chiller or heat exchanger.
- Requires active cooling with a water pump, not included. 1/2" fittings.

Water Cooled Light System & Reflectors

Fresca Sol™ Wing Reflector by Sun System®

Shown with optional lamp & Fresca Sol™

Item No.	Description	MSRP
904595	Fresca Sol™ Wing Reflector	$29.95

- Made of 95% reflective European aluminum.
- Easily attaches to the Fresca Sol™ with 4 thumb bolts.
- Ideal reflector design and restrike bend above lamp optimizes performance.
- Reflector dimensions: 19¾" long x 14¼" wide x 4½" high.

Fresca Sol™ Magnum Reflector by Sun System®

Shown with optional lamp & Fresca Sol™

Item No.	Description	MSRP
904610	Fresca Sol™ Magnum Reflector	$99.95

- Made of 95% reflective European aluminum.
- Designed specifically to be used with the Fresca Sol™ Light System.
- Easily assembles in minutes.
- Oversized design allows for a large coverage area even when it is placed very close to plants.
- Reflector dimensions: 34¼" long x 29" wide x 7¾" high.

Titan Controls® Ceto 1™ - Controller

Item No.	Description	MSRP
702685	Titan Controls® Ceto 1™ - Controller	$290.95

- Specifically designed to turn off a pump or light should a reservoir leak.
- Use with Fresca Sol lighting systems.
- Easy to use.
- Provides system security.
- Manual reset if system activates to avoid flooding.
- Waterproof NEMA chassis.
- 20 Amps/120 Volts/60 Hz.
- 3 year warranty

Coming Soon

Air-Cooled Adaptable Reflectors

Shown with optional socket assembly and lamp

6" Air Cooled Reflector
(Shown with 4-6" air duct fittings)

4" Air Cooled Reflector
(Shown with 2-4" air duct fittings)

Standard Reflector

Large Convertible Reflector

- Designed by Control Wizard Products™ and manufactured by Sunlight Supply®.
- Interchangeable parts to create the ideal reflector for your growing needs. Optional 4" and 6" air-cooled fittings available.
- Galvanized steel body with durable powder coated finish.
- 95% reflective European aluminum interior for maximum output.
- Advanced reflector designed for excellent performance and uniformity.
- Neoprene gasket and optional glass seal the reflector for optimum atmospheric control.
- Can accommodate 1-2 1000 watt lamps or 1-3 400/600 watt lamps.
- Includes: 1 - Socket bracket, 3 - block plates and 2 - louvered covers.

Item No.	Description	MSRP
902740	Large Convertible Reflector	$126.95
630541	4" Duct Fitting	$8.99
630538	6" Duct Fitting	$8.99
630533	Socket Mounting Bracket	$4.59
630537	Solid Block Plate	$4.59
630532	Louvered Plate	$4.59
902745	Convertible Optional Glass	$24.95

- Reflector dimensions: 24½" long x 24" wide x 11" high.

Super Sun® Reflector

Item No.	Description	MSRP
904000	Super Sun® Reflector	$121.95
904010	Replacement Super Sun® Tempered Glass	$18.95
904020	Replacement 4" Air-Cooled Fitting	$6.95/ea

- Includes tempered glass and air-cooled fittings.
- Integrated socket and 15' lamp cord.
- 95% reflective European aluminum interior for excellent output and uniformity.
- Compact size and advanced design delivers the highest output of any reflector on the market.
- Reflector dimensions: 21½" long x 11½" wide x 6¾" high.
- Patent Pending.

Air-Cooled Adaptable Reflectors

Item No.	Description	MSRP
904370	Yield Master™ II - 4" Reflector Classic	$77.95
904398	Yield Master™ II - 4" Optional Glass	$21.95
904020	Universal Air-Cooled Fitting – 4"	$6.95/ea

- Integrated socket and 15' lamp cord.
- 86% reflective European aluminum interior for excellent output and uniformity.
- Durable white powder coated finish.
- Easily air-cooled by attaching optional 4" fittings and glass.
- Reflector dimensions: 20¼" long x 21" wide x 7½" high.

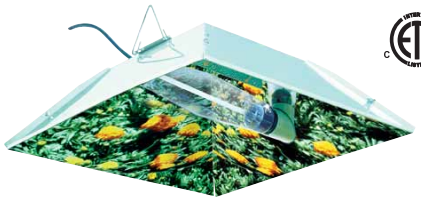
Yield Master™ II -4" *Classic* Reflector

Horizontal Reflectors

Item No.	Description	MSRP
904450	Agrotech™ Reflector	$66.95

- Comes unassembled – shipping carton is only 22" long x 11¼" wide x 4½" high. Makes for easy storage and shipping.
- Assembled reflector dimensions: 22" long x 21⅝" wide x 6¼" high.
- Pre-wired socket and 15' lamp cord.
- Does not accept glass.
- Patent Pending.

Agrotech™ Reflector



Item No.	Description	MSRP
904615	Agrotech™ Magnum Reflector	$132.95

- Comes unassembled. Easily set up in minutes.
- Compact box for easy storage and handling. Box dimensions: 34½" Long x 16½" Wide x 8" High.
- Assembled reflector dimensions: 31¼" long x 29" wide x 8½" high.
- 95% reflective European aluminum.
- Pre-wired socket and 15' lamp cord.
- Includes easy to follow assembly instructions.
- Does not accept glass.

Agrotech™ Magnum Reflector

Item No.	Description	MSRP
904620	Silver Sun Reflector™	$181.95

- Similar to the Vertizontal, the Silver Sun combines the features of the traditional vertical and horizontal reflectors into one exceptional reflector.
- Made from 95% reflective European aluminum.
- Large size provides for a large coverage area even when placed close to plants.
- V-strike bend above lamp to increase performance.
- Pre-wired with lamp cord and socket.
- Reflector dimensions: 49" long x 49" wide x 8" high.

Silver Sun Reflector™

All the reflectors above are shown with optional lamps

Item No.	Description	MSRP
904060	Vertizontal Reflector®	$157.95
180775	Replacement Vertizontal Socket Bracket	$22.95

ADVANTAGES of VERTICAL REFLECTORS:

- Large size provides a wide area of coverage from low mounting heights.
- Will accommodate all sizes of MH and HPS lamps.
- Low mounting height reduces distance to plants and thus increases light levels.

ADVANTAGES of HORIZONTAL REFLECTORS:

- HID lamps emit light in a continuous 360° ring emanating out from the arc tube. The main reason horizontally mounted lamps perform better is because much of their light is thrown downward.
- The introduction of 95% reflective European aluminum insert increased the light output (because of better reflectivity than powder coated steel) and evened out light patterns (because of its better diffusion qualities).
- It operates MH and HPS lamps in the horizontal position but in an eight-sided parabolic shaped reflector. In the horizontal burning position, much of the lamp's light is thrown straight down and the balance of the lamp's light which is emanating upward is re-directed back down in eight different directions simultaneously due to the unique shape of the center piece. This center is made entirely of 95% reflective European aluminum for maximum reflectivity and uniformity. The Vertizontal also features our Adjust-a-Socket mechanism for horizontal and vertical lamp adjustment.
- Reflector dimensions: 46" Diameter x 10" Deep.
- US Patent No: D545485.

Vertizontal Reflector®

Shown with optional lamp and socket

Item No.	Description	MSRP
904465	Econowing Reflector™ with Socket and Lamp Cord	$42.49

- Heavy duty galvanized steel mounting bracket.
- Corners are rounded – no sharp corners unlike competitive "gull-wing" type reflectors.
- Does not accept glass.
- Reflector dimensions: 21¼" long x 15" wide x 4½" high.
- US Patent No: D545485.

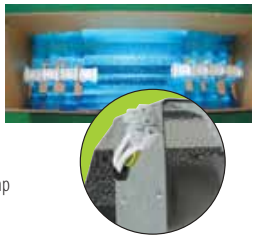
Econowing Reflector™

Shown with optional lamp

Horizontal Reflectors

Value Wing 8 Pack

Shown with optional lamp



Item No.	Description	MSRP
904467	Value Wing 8 Pack	$19.95/ea

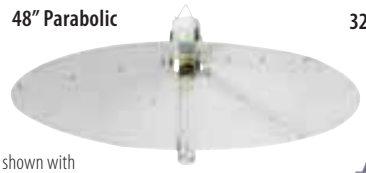
- Purchase 15' (903100) or 25' (903105) lamp cord separately.
- Terminal block for easy attachment of lamp cord.
- Socket pre-wired into reflector.
- Reflector dimensions: 18½" x 13½" x 5¾".

Vertical Reflectors

Parabolic & Cone Reflectors

48″ Parabolic

32″ Parabolic



42″ Cone

All reflectors are shown with optional lamp and socket

Item No.	Description	MSRP
904110	48″ Parabolic - White (1 center piece + 8 leaves)	$61.95
904115	32″ Parabolic - White (1 center piece + 8 leaves)	$42.95
904120	42″ Cone - White (4 quarter pieces)	$56.95
904126	Replacement Adjust-A-Socket Mounting Bracket Kit	$11.95

- Brushed aluminum on the backside and bright white on the inside.
- All reflectors include assembly hardware.
- Reflectors come unassembled.

Note: MP protected metal halide lamps necessary for ETL listings to apply on open (vertical burning) metal halide fixtures. Standard HPS lamps meet ETL listing requirements.

All reflectors include the Adjust-a-Socket mounting bracket. This exclusive adjustable bracket allows the user to raise or lower the lamp within the interior of the reflector, thus customizing light patterns.

Reflector Accessories

The Equalizer™ - Hot Spot Diffuser

904430 904435 904440

Fixtures that will accept the Equalizer™.
Agrotech
Agrotech - Magnum
BlockBuster 6″ & 8″
Cool Sun & Cool Sun XL
Econowing
Great White
Large Convertible
Magnum XXXL 6″ & 8″
Silver Sun
Super Sun 2
Vertizontal
Yield Master 4″, 6″, 8″ & 10″

Item No.	Description	MSRP
904430	The Equalizer™ Hot Spot Diffuser – HPS 1000	$29.95
904435	The Equalizer™ Hot Spot Diffuser – HPS 600/400	$29.95
904440	The Equalizer™ Hot Spot Diffuser – MH 1000/400	$29.95

- Simply slide this unique product over a mogul base socket on most horizontal burning reflectors to filter and disperse the intense "hot spot" of light directly under an HID lamp.
- With the hot spot diffused, you can hang reflectors closer to the plant canopy while reducing the risk of burning the plants directly under the lamp.
- The revolutionary shape, size and hole patterns were designed using the latest lighting development software.
- The Equalizer™ will aid in improving the uniformity of your fixture by reducing the hot spot below the lamp.
- Made of 95% reflective European aluminum.
- Patent Pending.

T5 Strip Light Magnetic Brackets

Item No.	Description	MSRP
904630	T5 Strip Light Magnetic Brackets - 1 pair	$29.95

- Use these brackets to attach T5 Strip Lights to Sun System® Reflectors.
- They attach to steel reflectors with powerful magnets.
- Add blue light from the 6500K T5's to your HPS lamp to offer plants a full spectrum of light.
- Brackets attach to Strip Lights with easy to use thumb bolts.
- Use with 2', 3′ or 4' T5 Strip Lights.
- Not for use with Agrotech Magnum.

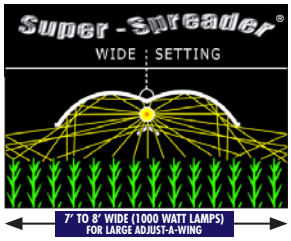
Adjust-A-Wings®

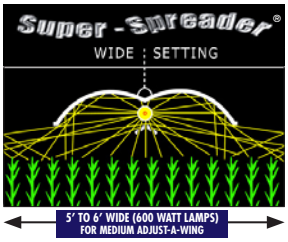
904535
Medium

industry exclusive

Shown with optional lamps and Super Spreaders®.

904540
Large





- The "Adjustable Light Spread" allows growers to create ideal lighting conditions across all stages of plant growth for increased vitality, health and yield.
- Made of 95% reflective proprietary German aluminum.
- Twice the power and efficiency of most other reflectors.
- Increase the growing area under each lamp by up to 75%.
- Increase yield per lamp up to 50%.
- Sold in 17 countries across 4 continents, Adjust-A-Wings® are the "reflectors of choice" for many of the world's top growers!
- Medium Dimensions: 22" x 24", 25", 26" or 27".
- Large Dimensions: 28" x 36", 37", 38", 39" or 40".

INCREASE YIELD! REDUCE HEAT! SAVE POWER!

Item No.	Description	MSRP
904535	Adjust-A-Wings® Medium – with cord	$164.95
904540	Adjust-A-Wings® Large – with cord	$215.95
904545	Adjust-A-Wings® Medium – no cord	$149.95
904550	Adjust-A-Wings® Large – no cord	$199.95
904555	Adjust-A-Wings® Socket Assembly – w/ cord	$39.95
904560	Adjust-A-Wings® Socket Assembly – no cord	$27.95

Adjust-A-Wings® Reflectors

904555

904560

An additional socket assembly can be added to a Large Adjust-A-Wing. Allows operation of two 400 watt MH & HPS lamps or two 600 watt HPS lamps.

"Message from the inventor"

The Adjust-A-Wings® original design combines cutting edge science with biological beauty and simplicity to create a reflector system of unparalleled performance and versatility.

The Adjust-A-Wings® can be adjusted to wide settings and positioned incredibly close to plants for maximum light transferal (growing power) and area coverage. Alternately, the wings may be adjusted to more narrow settings and positioned further from the plants to suit the light and heat requirements of more sensitive plants or plant stages.

The adjustable nature and even spread of the light foot print gives growers the unique ability to create seasonal (spring, summer, autumn) conditions indoors and efficiently trigger their plants natural hormone cycles for faster growth, better health & maturity and major yield increase.

The Adjust-A-Wings® novel design features are protected by a range of international patents registered, accepted and pending with I.P.O. Note: Illegal manufacture, wholesale, retail and purchase of patented products is punishable by law. Please report all illegal and inferior copies to info@hygro-int.com

Best regards,
Paul Cronk. Bsc - Env, Letters Patent. Patent No. US 6,053,624

It is highly recommended that a Super Spreader® be used with every Adjust-A-Wing®. Purchase separately.

Adjust-A-Wings® work great in Sun Huts™ & Grow Labs

2 x 4 Sun Hut™ = Medium Wing + Medium Spreader + 400 watt HPS

4 x 4 Sun Hut™ = Medium Wing + Medium Spreader + 600 watt HPS

4 x 8 Sun Hut™ = Large Wing + Large Spreader + 1000 watt HPS

or 2 x Medium Wings + 2 Medium Spreaders + 2 x 600 watt HPS

Super-Spreader®

industry exclusive

Item No.	Description	MSRP
904525	Super-Spreader® Medium	$29.95
904530	Super-Spreader® Large	$34.95

Super Spreaders

The ALL NEW Super-Spreader® combines common sense and innovation with advancements in reflective surface technology to produce a truly Super Light Spreader! The new design is attractive, lightweight and easy to install. The 'Spreader Heads' are made from 95% reflective glass coated Aluminum with a prismatic micro-textured surface.

This incredible alloy is super cool, very reflective and creates even light distribution. The prismatic surface reflects and redirects light in a selective 4-way pattern for incredible results!

How & Why They Work! The design of the Super-Spreader® is based on logic and simplicity. All horizontal reflectors create an over hot, over bright spot directly beneath the lamp. The Super-Spreader® spreads the excess light and heat proportionally to all areas of the grow room (especially the corners and edges which are often underlit). This creates even light and more harmonious growing conditions throughout the entire grow room.

NOTE: By attaching the Super-Spreader® accessory, the Adjust-A-Wings® performance may be enhanced significantly.

Adjust-A-Wings® fitted with Super-Spreader® can be lowered to an unprecedented 10"-12" from growing plants to produce awesome growing power while maintaining maximum area coverage and minimum heat build up. Yield increases of up to 50% are not uncommon with proper use of this truly outstanding product.

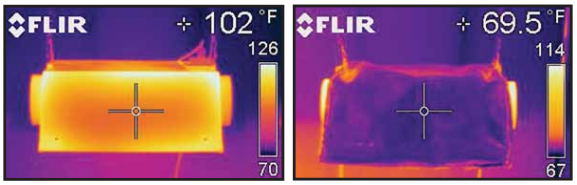
904530
Large

904525
Medium

Manufactured by Sunlight Supply®, Inc. under license from Hygro International Pty Ltd

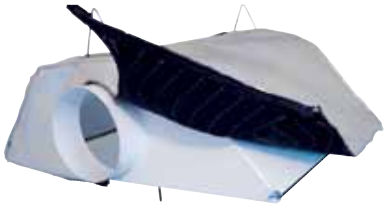
Hydro Innovations Reflector Accessories

Sun Shield® Ducting Covers



Item No.	Description	MSRP
736555	Sun Shield® Ducting – 6" x 10'	$29.95
736560	Sun Shield® Ducting – 8" x 10'	$34.95

The images at right were photographed using an infrared camera to show the effectiveness of the Sun Shield® Reflector Heat Shield. The reflector on the left has a temperature reading of 102° F without the Sun Shield® and the reflector on the right has a temperature reading of 69.5° F with the Sun Shield®.



Please visit our website at www.n-g-w.com & click "Product Videos" to see the Sun Shield® in use.

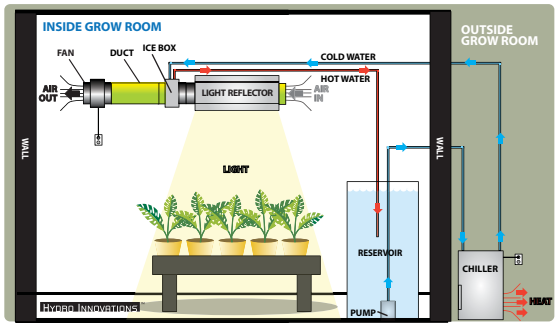
Sun Shield® Reflector Covers

The reflector heat shield is a sturdy, custom-fitted cover that double-insulates your existing air-cooled hood against the heat your lights generate. With the reflector heat shield, less heat escapes into your room and is instead contained within your hood to be better carried away by your existing air-cooling. This results in a cooler environment, happier plants, and energy savings in the form of increased A/C efficiency.

- IR blocking and heavy duty wool insulating material, custom fit to your favorite Sunlight Supply® reflectors.
- Reduce your grow room temperature.
- Maximizes efficiency of your air-cooling by containing heat.
- Quiets roaring air inside the reflector.
- Soft, durable and machine washable.
- Strong two piece construction consisting of a high quality insulating wool liner and radiant barrier fabric.

Item No.	Description	MSRP
904470	Sun Shield® for Cool Sun 6"	$59.95
904475	Sun Shield® for Cool Sun XL 8"	$59.95
904480	Sun Shield® for Super Sun 2	$59.95
904485	Sun Shield® for Yield Master II – 6"	$59.95
904495	Sun Shield® for Magnum XXXL 6"	$79.95
904498	Sun Shield® for Magnum XXXL 8"	$79.95

- 95% reflective.
- Professionally made in the USA.
- **Sun Shields are intended to be used only on actively air-cooled reflectors.**



Hydro Innovations Ice Box 6" & 8"

Finally, a safe and very efficient way to water-cool your entire grow room! It consists of a high-quality heat-exchanger with a strong molded plastic housing. One side of the housing is designed to install over a 6" or 8" air-cooled reflector duct flange, and as an option the opposite side can be attached to 6" or 8" air ducting (depending on inline fan placement). Air from your indoor garden is either pushed or pulled through the reflectors with an inline fan and then passed over the Ice Box heat exchanger. Cold water is circulated through the heat exchanger, cooling the air before it exits right back into the indoor garden area. The longer the tubing the higher the pump. But you don't want to use too high of a pump, due to the fact that it may not allow adequate time for the water to chill. If humidity is an issue in your room, you may want to put the reservoir outside the room.

- ¼ HP minimum chiller size is recommended per 1000 watts.
- 600-900 gph pump needed depending on the length and size of the tubing.

Item No.	Description	MSRP
904490	Ice Box 6"	$149.95
904493	Ice Box 8"	$199.95

- Approximately 250 cfm of airflow is needed to properly cool the fixture.
- Several units can be daisy chained together using one fan, only 250 cfm is needed through all fixtures.
- For maximum efficiency we recommend one Ice Box per reflector.
- Allows you to keep a sealed room and helps keep pest and pathogens out of the room.
- Keeps CO_2 in the room instead of exhausting it out.
- By running the water approximately 20 degree colder than your environment it can reduce the cooling load or replace your a/c unit.
- Can be wall mounted with optional wall mount kit that includes the bracket and ducting coupler.

Hydro Innovations Ice Box Wallmount Brackets

Item No.	Description	MSRP
904491	Ice Box 6" Wall Mount Bracket	$24.95
904494	Ice Box 8" Wall Mount Bracket	$34.95

- Complete wall mount kit that includes the bracket and ducting coupler.
- Use to mount Ice Box to the wall or ceiling.

T5 VHO Fluorescents

BRAND NEW TECHNOLOGY - We use proprietary VHO electronic ballasts & lamps paired together for amazing performance. We are NOT simply over-driving HO lamps.

Sun System® Solar Flare™ T5 Very High Output (VHO) Fluorescent Lighting Fixtures

- 95% reflective European aluminum reflectors.
- Major brand solid state electronic ballasts.
- Dedicated 120 volt or 240 volt input power (must specify when ordering).
- Heavy duty white steel housing.
- Louvered and slotted for efficient cooling capability.
- Comes complete with 2 chrome wire hangers for mounting/hanging.
- Grounded power cord.
- Purchase your choice of lamps separately.
- VHO Lamps offer 7200 lumens - 95 watts each.
- Backlit on/off switch. 8-lamp and 12-lamp models offer 2 switches for a variety of lamp configurations.
- Convenience receptacle.
- Do not use HO lamps with VHO fixtures.

7,200 LUMENS PER LAMP!

Solar Flare 412 in 4 x 4 Sun Hut over a Botanicare 4 x 4 tray.

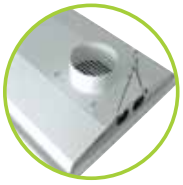
2 Year Warranty

industry exclusive

Item No.	Description	Voltage	Size	Lumens	# Switches	# Outlets	Fixture Dimensions	MSRP
960250	Solar Flare™ 44 VHO	120 Volt	4 Ft - 4 Lamp	28,800	N/A	1	47" L x 14.5" W x 4.5" H	$274.95
960255	Solar Flare™ 48 VHO	120 Volt	4 Ft - 8 Lamp	57,600	2	1	47" L x 29" W x 4.5" H	$449.95
960257	Solar Flare™ 48 VHO	240 Volt	4 Ft - 8 Lamp	57,600	2	1 @ 240V	47" L x 29" W x 4.5" H	$449.95
960258	Solar Flare™ 412 VHO	120 Volt	4 Ft - 12 Lamp	86,400	2	N/A	47" L x 44" W x 4.5" H	$599.95
960259	Solar Flare™ 412 VHO	240 Volt	4 Ft - 12 Lamp	86,400	2	1 @ 240V	47" L x 44" W x 4.5" H	$599.95

Sun System® Solar Wind™ Air Cooled Very High Output (VHO) Fluorescent Lighting Fixtures

- Industry's first air-cooled T5 fixtures!
- 4" A/C fitting on 4-lamp models; 6" A/C fitting on 8-lamp models.
- All fixtures include glass.
- All fixtures must be used with fan and glass at all times.
- 95% reflective European aluminum reflectors.
- Major brand solid state electronic ballasts.
- Heavy duty powder coated white, steel housing.
- Purchase your choice of lamps separately.
- VHO Lamps offer 7200 lumens - 95 watts each.
- Backlit on/off switch. 8-lamp model offers 2 switches for flexible lamp configurations.
- Convenience receptacle.
- Dedicated 120 volt or 240 volt input power (must specify when ordering).
- Do not use HO lamps with VHO fixtures.
- 44 replacement glass #360090.
- 48 replacement glass #360095.



7,200 LUMENS PER LAMP!

2 Year Warranty

industry exclusive

Item No.	Description	Voltage	Size	Lumens	# Switches	# Outlets	Fixture Dimensions	MSRP
960260	Solar Wind™ 44 VHO	120 Volt	4 Ft - 4 Lamp	28,800	1	2	47.9" L x 14.4" W x 3.3" H	$349.95
960265	Solar Wind™ 48 VHO	120 Volt	4 Ft - 8 Lamp	57,600	2	2	47.9" L x 27.2" W x 3.3" H	$499.95
960267	Solar Wind™ 48 VHO	240 Volt	4 Ft - 8 Lamp	57,600	2	N/A	47.9" L x 27.2" W x 3.3" H	$499.95

T5 HO Fluorescents

Sun System® Ready Fit® T5 High Output Fluorescent Lighting Fixtures

- Completely assembled fixture with high output ballast.
- Features waterproof end caps.
- This fixture is intended to be surface mounted.
- Major brand ballasts.
- Features our exclusive Tek reflectors – increases output 300% vs. lamps without reflectors.
- 8 foot grounded power cord.
- Lightweight and easy to install.
- Aluminum housing.

1 Year Warranty

Shown with optional lamps

Waterproof End Caps

Easily, mounts with 4 screws

Item No.	Description	Size	Lumens	Fixture Dimensions	MSRP
250535	Ready Fit® T5 - 22	2 Ft - 2 Lamp	4,000	24.7" L x 6" W x 3.7" H	$147.95
250530	Ready Fit® T5 - 32	3 Ft - 2 Lamp	6,600	36.6" L x 6" W x 3.7" H	$154.95
250525	Ready Fit® T5 - 42	4 Ft - 2 Lamp	10,000	48.2" L x 6" W x 3.7" H	$159.95

T5 HO Fluorescents

Fixtures include FREE Spectralux™ 6500°K Lamps pre-installed in fixtures

5 Year Warranty

NEW Packaging & Wider Fixtures

Sun Blaze® T5 Fluorescent Light Fixtures

Item No.	Description	Size	Fixture Dimensions	Max Chained	MSRP
960290	Sun Blaze® T5 - 22	2 Ft - 2 Lamp	23.75" L x 7.75" W x 2.675" H	13	$87.95
960295	Sun Blaze® T5 - 24	2 Ft - 4 Lamp	23.75" L x 12.675" W x 2.675" H	6	$121.95
960293	Sun Blaze® T5 - 28	2 Ft - 8 Lamp	23.75" L x 22.5" W x 2.675" H	3	$232.95
960296	Sun Blaze® T5 - 42	4 Ft - 2 Lamp	47.75" L x 7.75" W x 2.675" H	7	$114.95
960300	Sun Blaze® T5 - 44	4 Ft - 4 Lamp	47.75" L x 12.675" W x 2.675" H	3	$159.95
960302	Sun Blaze® T5 - 46	4 Ft - 6 Lamp	47.75" L x 17.375" W x 2.675" H	2	$221.95
960305	Sun Blaze® T5 - 48	4 Ft - 8 Lamp	47.75" L x 22.5" W x 2.675" H	2	$259.95

- New wider advanced reflector design offers excellent reflectivity and diffusion.
- White powder coated steel housing.
- Wire cable hangers included with every fixture. Now you can choose to hang horizontally or vertically.
- 12 foot power cord and on/off switch allows for easy operation.
- Louvered for cool operation.
- High output lamps have an extremely high lumen per watt rating.
- Run on 120 volt power only.
- 3000° K (red) lamps can be purchased separately.
- Daisy chain feature allows multiple fixtures to be plugged in together.
- New "eco-friendly" recyclable packaging.

Sun System® New Wave® T5 High Output Fluorescent Light Fixtures

- 95% reflective European aluminum reflector.
- Major brand solid state electronic ballasts.
- Smart Volt® ballasts can run on 120, 208, 240, & 277 volt input power for New Wave® 42, 44 & 48 only.
- New Wave® 22, 24 & 28 are 120 volt only.
- Heavy duty white steel housing.
- Louvered and slotted for efficient cooling.
- Comes complete with 2 chrome mounting hangers.
- 8' grounded power cord.
- Purchase your choice of lamps separately.
- US Patent No's: D543653, D544981, D544985, D544130, D543654 & D544982.

New Wave® 28, 44 & 48 are able to be "Daisy Chained" together.

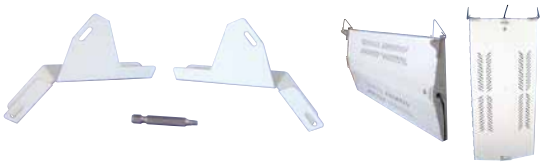
New Wave® 42, 44 & 48 Feature the Smart Volt® Ballast(s). Can run on 120, 208, 240 & 277 volt input power.

Shown with optional lamps

2 Year Warranty

Item No.	Description	Size	Lumens	Fixture Dimensions	Max # Chained @ 120 Volt	Max # Chained @ 240 Volt	MSRP
960201	New Wave® T5 - 22	2 Ft - 2 Lamp	4,000	22.9" L x 7.1" W x 3.5" H	N/A	N/A	$92.95
960203	New Wave® T5 - 24	2 Ft - 4 Lamp	8,000	23.3" L x 11" W x 3.5" H	N/A	N/A	$126.95
960204	New Wave® T5 - 28	2 Ft - 8 Lamp	16,000	21.3" L x 22.8" W x 3.5" H	N/A	N/A	$211.95
960195	New Wave® T5 - 42	4 Ft - 2 Lamp	10,000	47" L x 6" W x 3.5" H	10	16	$151.95
960200	New Wave® T5 - 44	4 Ft - 4 Lamp	20,000	47" L x 11" W x 3.5" H	5	8	$219.95
960202	New Wave® T5 - 48	4 Ft - 8 Lamp	40,000	47" L x 21" W x 3.5" H	3	5	$371.95

New Wave® T5 Side Light Bracket Kit



Item No.	Description	MSRP
903260	New Wave® T5 Side Light Bracket Kit	$9.95

Unit includes left & right bracket, square drive bit for installation and complete instructions. Kit installs easily in 3 minutes. Hang the light vertically or horizontally. Compatible with New Wave® 44 & 48.

T5 HO Fluorescents

Sun System® Solar Wind™ Air Cooled High Output (HO) Smart Volt Fluorescent Lighting Fixtures

- Industry's first air-cooled T5 fixtures!
- 4" A/C fitting on 4-lamp models; 6" A/C fitting on 8-lamp models.
- All fixtures include glass.
- All fixtures must be used with fan and glass at all times.
- 95% reflective European aluminum reflectors.
- Major brand solid state electronic ballasts.
- Heavy duty powder coated white, steel housing.
- Comes complete with 2 chrome wire hangers for mounting/hanging.
- Grounded power cord.
- Purchase your choice of lamps separately.
- Backlit on/off switch. 8-lamp model offers 2 switches for flexible lamp configurations.
- Convenience receptacle.
- Smart Volt feature allows fixture to run on 120 or 240 volt power. Detachable power cord allows easy change over. Comes standard with 120V cord, purchase 240V cord separately (part # 903082).
- HO lamps offer 5000 lumens - 54 watts each.

industry exclusive

2 Year Warranty

Item No.	Description	Voltage	Size	Lumens	# Switches	Fixture Dimensions	MSRP
960270	Solar Wind™ 44 HO - Smart Volt™	120/240 Volt	4 Ft - 4 Lamp	20,000	1	47.9" L x 14.4" W x 3.3" H	$299.95
960275	Solar Wind™ 48 HO - Smart Volt™	120/240 Volt	4 Ft - 8 Lamp	40,000	2	47.9" L x 27.2" W x 3.3" H	$439.95

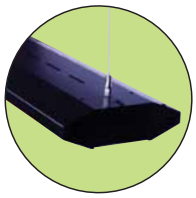
Sun System® Tek-Light™ T5 High Output Fluorescent Lighting Fixtures

- High output lamps have an extremely high lumen per watt rating. 5,000 lumens per lamp ÷ 54 watts = 92.59 lumens/watt. *Reference Point: a F40 cool white lamp: 1,260 lumens per lamp 440 watts = 31.5 lumens/watt.
- Lamps have very low heat factor which allows the fixture to be hung very close to plant canopy, thus raising light levels.
- The Tek-Light's exclusive 9-bend reflector is made of 95% reflective European aluminum. Light output is 300% higher in our reflector vs. a lamp with no reflector.
- Features a light-weight, rust proof aluminum body.
- Major brand solid state electronic ballasts (no copper windings) do not emit heat, noise or vibration.
- "Smart Volt®" ballasts can run on 120, 208, 240 & 277 volt input power.
- Unique design places ballasts outside lamps (instead of above lamps as in competitive fixtures) for longer fixture life.
- Backlit on/off switch. Four, six and eight lamp model features two on/off switches to run a variety of lamp configurations if desired.
- Slotted and louvered for cool operation.
- US Patent No's: D545996, D543651, D544980, D544129 and D545475.

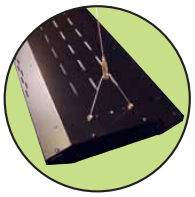
2 Year Warranty

Features Smart Volt® Ballast(s). Can run on 120, 208, 240 & 277 volt input power.

Shown with optional lamps



OPTIONAL: Product No. 750000 Adjustable Cable Hanger System - 1 Point Connection



OPTIONAL: Product No. 750001 Adjustable Cable Hanger System - 2 Point Connection

Item No.	Description	Size	Lumens	Fixture Dimensions	MSRP
960005	Tek-Light™ T5 - 24*	2 Ft - 4 Lamp	8,000	24" L x 12" W x 2½" H	$264.95
960015	Tek-Light™ T5 - 34*	3 Ft - 4 Lamp	13,200	36" L x 12" W x 2½" H	$289.95
960020	Tek-Light™ T5 - 36*	3 Ft - 6 Lamp	19,800	36" L x 15¾" W x 2½" H	$329.95
960095	Tek-Light™ T5 - 42	4 Ft - 2 Lamp	10,000	48" L x 9" W x 2½" H	$212.95
960100	Tek-Light™ T5 - 44	4 Ft - 4 Lamp	20,000	48" L x 12" W x 2½" H	$299.95
960105	Tek-Light™ T5 - 46	4 Ft - 6 Lamp	30,000	48" L x 16" W x 2½" H	$404.95
960110	Tek-Light™ T5 - 48	4 Ft - 8 Lamp	40,000	48" L x 20" W x 2½" H	$449.95

*Please note these fixtures come with two power cords for independent control of each ballast.

Sun Blaster T5 Fluorescent Strip Lights

- Built in electronic ballast provides instant starting with no flickering.
- Durable aluminum housing.
- Lasts up to 10,000 hours.
- Lightweight and easy to install.
- Fixture includes 6500° K full spectrum lamp.

1 Year Warranty

Item No.	Description	Size	Watts	MSRP
904301	Sun Blaster T5 Strip Light	2 Foot	24	$27.95
904302	Sun Blaster T5 Strip Light	3 Foot	39	$30.45
904303	Sun Blaster T5 Strip Light	4 Foot	54	$32.95

Sun Blaze® T5 Strip Lights High Output Fluorescent Fixtures

- High Output ballast.
- Light weight and easy to install.
- Durable aluminum housing.
- Accommodates standard 2' & 4' replacement lamps.
- On/off switch for ease of use.
- Fixture Includes: 6500°K HO lamp.
- Mounting hardware.
- Power cord & 4" jumper cable to daisy chain multiple fixtures.

Item No.	Description	Size	Fixture Dimensions	Watts	Max # Daisy Chained	MSRP
960315	Sun Blaze® T5 Strip Light	2 Foot	23.75" L x 1" W x 1.75" H	24	10	$27.95
960320	Sun Blaze® T5 Strip Light	4 Foot	47.5" L x 1" W x 1.75" H	54	5	$32.95

1 Year Warranty

Sun Blaze® T5 Strip Light Accessories

Sun Blaze® T5 Strip Light Jumper Cords

Item No.	Description	MSRP
960330	Replacement 4" Jumper Cord for Sun Blaze® T5 Strip Lights	$1.99
960325	18" Jumper Cord for Sun Blaze® T5 Strip Lights	$2.99
960335	4' Jumper Cord for Sun Blaze® T5 Strip Lights	$4.59

Use the jumper cords to daisy chain two or more Sun Blaze® T5 Strip Lights together. The 18" or 4' jumper cord replaces the 4" jumper cord that is included with the fixture. Allows the user to space the fixtures further apart for added flexibility. Use the 4" jumper cord for tighter spaces and where the lights are closer together.

Sun Blaze® T5 Strip Light Reflectors

Item No.	Description	MSRP
904307	Sun Blaze® T5 Strip Light Reflector 2'	$11.95
904309	Sun Blaze® T5 Strip Light Reflector 4'	$17.95

- State of the art design significantly enhances the performance of the Sun Blaze® T5 Strip Light.
- Manufactured with 95% reflective European aluminum for maximum output and diffusion.
- Easy installation – simply slips over the top of the Sun Blaze® T5 Strip Light.

Sun Blaze® T5 Strip Light Hanging Bracket Kit

Item No.	Description	MSRP
904308	Sun Blaze® T5 Strip Light Hanging Bracket Kit	$9.95

This kit allows for easy hanging of our Sun Blaze® T5 Strip Lights. Bracket slides into the ends of two strip lights. Bracket can be hung using the included chrome hangers or can be mounted into a canopy with the included wood screws. Two or more of these kits can be attached together using the included nuts & bolts while using only one power cord.

T5 Strip Light Magnetic Brackets

Item No.	Description	MSRP
904630	T5 Strip Light Magnetic Brackets - 1 pair	$29.95

- Use these brackets to attach T5 Strip Lights to Sun System® Reflectors.
- They attach to steel reflectors with powerful magnets.
- Add blue light from the 6500K T5's to your HPS lamp to offer plants a full spectrum of light.
- Brackets attach to Strip Lights with easy to use thumb bolts.
- Use with 2', 3' or 4' T5 Strip Lights.
- Not for use with Agrotech Magnum.

Fluorescents

Spectra Lite T8/T12 Fluorescent Fixture

1 Year Warranty

Item No.	Description	Size	Fixture Dimensions	MSRP
960130	Spectra Lite 4' T8/T12	4 Ft - 2 Lamp	50 5/8" x 7" x 3"	$29.95

- Versatile, multi-lamp fixture accepts 4' T8 32 watt lamps or 34-40 watt T12 lamps.
- Light weight, only 6.25 lbs.
- Easy pull on/off chain switch.
- Includes 2 "S" hooks and mounting chain.
- Bright white reflective interior.
- Electronic ballast.
- Lamps sold separately.
- Outstanding for use as a propagation grow fixture.
- Excellent general use lighting fixture.

Bright Wing® Reflector Fluorescent Grow Lamp Fixture

5 Year Warranty

Item No.	Description	MSRP
904290	Bright Wing® Fluorescent Grow Lamp Fixture	$36.95

- Highly reflective textured aluminum, offering excellent reflective and diffusion properties.
- Includes mogul base socket and 8' grounded power cord.
- Accommodates compact fluorescent grow lamps (sold separately).
- Includes integrated mounting bracket with chrome wire hangers.
- Fixture dimensions: 21¼" Long x 15" Wide x 4½" Tall.
- US Patent No: D544995.
- Accommodates Feliz™ self-ballasted compact fluorescent lamps 125, 200 and 250 watts.

Sun System® Garden Bright™ Fluorescent Grow Light

NEW!

5 Year Warranty

Item No.	Description	MSRP
960207	Sun System® Garden Bright™ Fluorescent Grow Light	$79.95

- Highly reflective textured aluminum interior.
- Slotted and louvered for maximum air cooling.
- 8' grounded power cord.
- On/off switch.
- Completely assembled.
- Fixture dimensions: 19¾" Long x 12¼" Wide x 7½" Tall.
- US Patent No: D542460.
- Accommodates Feliz™ self-ballasted compact fluorescent lamps 125, 200 and 250 watts.

EYE HORTILUX™

High Performance Light for High Performance Growth

EYE HORTILUX™ branded product (manufactured by EYE Lighting International of North America Inc.) is a complete line of exclusive, High Intensity Discharge (HID) lamps. These lamps, including High Pressure Sodium (HPS) and Metal Halide, recreate the spectral distributions similar to natural sunlight and promote optimal plant growth. Used with both magnetic and electronic ballasts, HORTILUX lamps are favored in the industry among indoor growing enthusiasts and commercial greenhouses.

Unlike our competitors, all of our USA manufactured lamps carry an "EN" symbol meaning these lamps are environmentally friendly. By using lead free glass, eliminating lead solder, and minimizing mercury in the arc tubes, HORTILUX offers consumers a "greener" option when making their lamp purchase. Lamps carrying this EN symbol are considered non-hazardous material by the federal EPA.

solarMAX™

All SolarMax lamps are manufactured in Germany by an ISO certified factory with over 40 years experience in HPS and MH lamp technology, ensuring high quality and optimized performance. SOLARMAX grow lamps are designed with the grower in mind. Reduced lamp sizes fit most horticultural lighting fixtures. Custom tailored spectral distributions. Highest output. All SolarMax lamps carry a full ONE YEAR WARRANTY.

USHIO

Hi LUX GRO™

high quality horticulture lamps

Ushio introduces "Hi-Lux Gro", a new line of grow lamps to promote enhanced vegetative growth and flowering. The lamps are made to assure consistency in quality and optimized for high performance. Made in Germany by ISO9001 certified facility.

- Super high output lamp technology.
- Optimized spectrum, distribution pattern, lumen output and irradiance.
- Reliable operation throughout the growth cycle.
- Highest quality and consistent performance.
- Engineered in ISO 9001 certified facility.

ULTRA SUN

These high output, full spectrum lamps are ideal for plant growth, especially for growing fruits, vegetables, flowers and herbs. They are engineered specifically for horticultural applications. Ultra Sun lamps feature robust construction for superior reliability. We now offer a full line of Ultra Sun brand lamps including HPS, MH, Conversion lamps, & Dual Arc Tube HPS/MH 1000 watt lamps. Excellent quality lamps at an economical price.

CHROME DOME

A reflector is built into the lamp. No need for a traditional lighting reflector.

- Operates on standard High Pressure Sodium ballast.
- 95% efficient – amazing uniformity!
- High output 600 watt HPS has 95,000 lumens.
- Adjustable lamp base for perfect alignment.

LUCALOX® PSL

PHOTOSYNTHESIS LAMP

Specially developed for greenhouses, the Lucalox® XO PSL offers the twin benefits of stable lumen maintenance and a full spectrum content that promotes photosynthesis. Photosynthesis active radiation (measured in micromole/sec) is essential for plant growth.

Simple light or lumen maintenance is not enough to create plant growth. Plants require a certain radiation level to help with photosynthesis. The Lucalox® XO PhotoSynthesis Light Lamp has been specially developed to provide stable lumen maintenance and increases Photosynthetically Active Radiation (PAR).

As well as the scientific technology of light output, reliability and performance have also been key factors to the development of the Lucalox® XO PSL lamp range. Robust construction, reliable starting technology and improved lumen maintenance ensure peace of mind against early lamp failures and provide the consistency demanded for perfect growing conditions.

PHILIPS Agrolite XT & Master Son-T Agro PIA

Master Son-T Agro PIA High Pressure Sodium Lamps

- High lumen and growth light maintenance safeguards a constant crop quality and quantity over life.
- Ceramic discharge tube with PIA technology for long and reliable lifetime.
- Simple and robust construction for enhanced reliability and longer life.
- Increased blue spectrum is excellent for hobby growers.

Philips Agrolite XT High Pressure Sodium Lamps

- Enhanced spectrum Xtreme grow lamp offers 22% more micromols.
- Excellent lumen and growth light maintenance at 97% safeguards a constant crop quality and quantity over life.
- Ceramic discharge tube with PIA technology, simple and robust construction for reliable lifetime.
- Features ALTO® Lamp Technology, environmentally responsible lamps.

SUNMASTER®

SUNMASTER grow lamps consistently deliver new levels of performance in plant growth.

Developed by distinguished physicists and leading agricultural researchers, the SUNMASTER line has been built on the marvelous versatility and flexibility of metal halide technology. By blending specific halides in the arc tubes, we 've created lamps which offer significantly more usable light energy. Moreover, each SUNMASTER lamp has been customized to meet the diverse nutrition requirements of plants at various stages of their growth cycles.

So, while the sun may come and go, SUNMASTER lamps are sure to consistently provide new levels of quality and productivity. Welcome to the future of light... Welcome to SUNMASTER.

PHILIPS SYLVANIA

Lamp & Reflector Cleaning Cloth

Item No.	Description	MSRP
901475	Lamp & Reflector Cleaning Cloth	$2.49

All light bulbs need to be wiped clean of finger prints after installation. Our micro fiber lamp cleaning cloth is perfect for doing this. Removes finger prints and dust from lamps, glass, light fixtures, etc.

- Individually packaged
- Size: 16" x 16"
- Streak free
- Scratch free
- Lint free
- Ultra soft

HIGH PRESSURE SODIUM LAMPS

STANDARD HPS LAMPS

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
150 Watt Lamps						
901505	150	Phil, Syl, GE™	LU150/Medium	16,000	ED-17	$23.95
901510	150	GE™	LU150/Mogul	16,000	ED-23.5	$23.95
250 - 400 Watt Lamps						
901515	250	Phil, GE™	LU250	28,500	ET-18	$24.95
901520	400	Phil, Syl, GE™	LU400	50,000	ET-18	$25.95
600 Watt Lamp						
901525	600	GE™	LU600	92,000	ET-14	$89.95
750 Watt Lamp						
901527	750	Syl	LU750	105,000	BT-37	$89.95
1000 Watt Lamp						
901530	1000	Phil, Syl, GE™	LU1000	140,000	E-25	$69.95

CHROME DOME® REFLECTORIZED LAMP

- 95% efficient with amazing uniformity.
- Adjustable lamp base for perfect alignment.
- Approximate initial lumens 95,000.

Item No.	Description	MSRP
901873	Chrome Dome® 600 watt reflectorized lamp	$116.95

ENHANCED PERFORMANCE HPS LAMPS

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
250 - 430 Watt Lamps						
901541	250	Eye Hortilux™	LU250S/HTL/EN	30,500	ET-18	$84.95
901540	270	Lumenarc®	Super Agro LU270	29,500	ED-18	$63.95
901545	400	Eye Hortilux™	LU400S/HTL/EN	55,000	ET-18	$92.95
901555	400	Sylvania	GroLux	58,000	T-17	$75.95
902800	400	SolarMax™	Super HPS	55,000	T-15	$57.95
901548	400	GE	Lucalox® PSL/XO	56,500	T-15	$61.95
902900	400	Ushio	AHS400 Opit Red	56,000	T-15	$75.95
901560	430	Philips	Son Agro C-430	53,000	ED-18	$63.95
901565	430	Eye Hortilux™	LU430S/HTL/EN	58,500	ET-18	$95.95
600 Watt Lamps						
901570	600	Eye Hortilux™	LU600S/HTL/EN	88,000	ET-18	$117.95
901582	600	Sunmaster®	SL.600W.U15.VRD	90,000	T-14.5	$82.00
902805	600	SolarMax™	Super HPS	95,000	T-15	$82.95
901583	600	GE	Lucalox® PSL/XO	90,000	T-17	$81.95
901572	600	Philips	Master SonT Agro	88,500	T-17	$99.95
902905	600	Ushio	AHS600 Opti Red	90,000	T-15	$105.95
750 Watt Lamp						
901584	750	GE™ Lucalox™ PSL/XO	LU/750W/PSL	104,000	T-15	$99.95
1000 Watt Lamps						
901585	1000	Eye Hortilux™	LU1000B/HTL/EN	145,000	E-25	$119.95
901871	1000	Sunmaster®	Super 1000 W.U25.VRD	145,000	E-25	$98.00
902810	1000	SolarMax™	Super HPS	147,000	T-23	$121.95
902811	1000	Philips Agro-Lite XT	C1000552/AGROLITE XT	146,000	E 25	$105.95
902910	1000	Ushio	AHS1000 Opti Red	146,000	T-23	$124.95

HIGH PRESSURE SODIUM LAMPS

LUMATEK LAMPS

Lumatek is proud to introduce its new line of horticultural specific high-par output lamps. Designed by the world's leading HID lamp engineers, these lamps provide exceptional performance on both magnetic and electronic ballasts. 100% European engineered and manufactured Lumatek's high-par output lamps deliver an optimized spectrum and high level of Photosynthetic Active Radiation to promote healthy plant growth. These lamps have strengthened seals and a reinforced arc frame to ensure that they will provide long lasting performance with stable lumen output. 1 year warranty.

1000 Watt April 2010

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP	
901841	400	Lumatek	400 HPS	60,000	T-17	$72.95	NEW!
901842	600	Lumatek	600 HPS	92,000	T-17	$102.95	NEW!
901843	1000	Lumatek	1000 HPS	145,000	E-25	$117.95	NEW!

ULTRA SUN™ LAMPS

These high output, full spectrum lamps are ideal for plant growth, especially for growing fruits, vegetables, flowers and herbs. They are engineered specifically for horticultural applications. Ultra Sun lamps feature robust construction for superior reliability. We now offer a full line of Ultra Sun brand lamps including HPS, MH, Conversion lamps, & Dual Arc Tube HPS/MH 1000 watt lamps. Excellent quality lamps at an economical price. One year warranty.

Coming Soon

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP	
High Pressure Sodium Lamps							
901523	150	Ultra Sun™	LU150/HPS	16,000	ED23.5	$18.95	
901529	250	Ultra Sun™	LU250/HPS	29,000	ET18	$19.95	
901528	400	Ultra Sun™	LU400/HPS	50,000	ET18	$19.95	
901526	600	Ultra Sun™	600 Super HPS	90,000	T15	$59.95	
901531	1000	Ultra Sun™	1000 Super HPS	140,000	E25	$61.95	
Metal Halide Blue-Enhanced Performance Lamps							
901534	400	Ultra Sun™	MS400/7500K	32,000	T-18	$37.95	NEW!
901542	400	Ultra Sun™	MS400/10000K	32,000	T-18	$37.95	NEW!
901538	1000	Ultra Sun™	MS1000/7500K	100,000	T-120	$61.95	NEW!
901544	1000	Ultra Sun™	MS1000/10000K	90,000	T-120	$61.95	NEW!
Dual Arc Tube Lamp							
901546	1000	Ultra Sun™	LU1000MH/DA	110,000	ET-25	$109.95	NEW!
Metal Halide Conversion Lamps - Operate on HPS or Electronic Ballasts							
901533	150	Ultra Sun™	MH150W/LU	13,000	ED-17	$29.95	NEW!
901537	600	Ultra Sun™	MH600W/LU	57,000	T-25	$97.95	NEW!
901539	1000	Ultra Sun™	MH1000W/LU	100,000	T-120	$97.95	NEW!

MASTER BLASTER 1500 WATT LAMP

The Master Blaster 1500 watt lamp is brand new technology. This revolutionary lamp offers an amazing output at 206,000 lumens. This is a very well constructed and robust lamp. 1 year warranty.

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP	
901692	1500	Master Blaster	1500 HPS	206,000	E25	$149.95	NEW!

METAL HALIDE LAMPS

STANDARD METAL HALIDE LAMPS

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
175-250 Watt Lamps						
901625	175	Phil, Syl, GE™	MH175/U/Medium	13,500	ED 17	$32.95
901640	250	Phil, GE™	MH250/U	20,500	ED28	$29.95
400 Watt Lamps						
901650	400	Phil, Syl, GE™	MH400/U	36,000	BT or ED37	$29.95
901653	400	GE™	MH400/Pulse Start	20,000	ED37	$43.95
1000 Watt Lamps						
901665	1000	Phil, Syl, GE™	MH1000/U/BT-56	110,000	BT-56	$54.95
901675	1000	Phil, Syl, GE™	MH1000/U/BT-37	110,000	BT-37	$65.95
901533	150	Ultra Sun™	MH150W/LU	13,000	ED-17	$29.95
901539	1000	Ultra Sun™	MH1000W/LU	100,000	T-120	$97.95

METAL HALIDE LAMPS

SUPER METAL HALIDE HORIZONTAL LAMPS

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
400 Watt Lamps						
901721	400	Eye Hortilux™	M400/HOR/HTL	39,000	BT-37	$69.95
1000 Watt Lamps						
901722	1000	Eye Hortilux™	M1000/B/U/BT37/HTL	110,000	BT-37	$84.95
901720	1000	Venture®	MS 1000/Hor BT-37	115,000	BT-37	$85.95

SUPER METAL HALIDE BASE-UP LAMPS

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
901735	1000	Phil, Syl, GE™	MS1000BU	125,000	BT-56	$73.95
901740	1000	Syl, GE™ (SO)	MS 1000 C/BU	119,000	BT-56	$74.95

PROTECTED METAL HALIDE LAMP

This is the first protected metal halide lamp (MP) designed to run in a horizontal position. Protective glass safety lens NOT required when using this lamp for ETL listing to apply.

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
901677	1000	Eye Hortilux™	MP1000BX/U	90,000	BT-37	$109.95

BLUE-ENHANCED PERFORMANCE METAL HALIDE LAMPS

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
250 Watt Lamp						
901791	250	Eye Hortilux™ Blue	MT250D/HOR/HTL6500°k 92CRI	18,000	T-15	$119.95
400 Watt Lamps						
NEW! 901534	400	Ultra Sun™	MS400/7500	32,000	T-18	$37.95
NEW! 901542	400	Ultra Sun™	MS400/10000	32,000	T-18	$37.95
901792	400	Eye Hortilux™ Blue	MT400D/HOR/HTL6500°k 92CRI	29,000	T-17	$124.95
901800	400	Sunmaster®	M.400W.U37.CDX	30,000	BT-37	$109.00
902820	400	SolarMax™	SolarMax™ Veg 7200°K	32,000	T-15	$116.95
1000 Watt Lamps						
NEW! 901538	1000	Ultra Sun™	MS1000/7500	100,000	T-120	$61.95
NEW! 901544	1000	Ultra Sun™	MS1000/10000	90,000	T-120	$61.95
901796	1000	Eye Hortilux™ Blue	MT1000D/HOR/HTL5500°k 92CRI	80,000	T-120	$219.95
901802	1000	Sunmaster®	M.1000W.U37.CDX	80,000	BT-37	$117.00
902815	1000	SolarMax™	SolarMax™ Veg 7200°K	85,000	T-25	$121.95
901533	150	Ultra Sun™	MH150W/LU	13,000	ED-17	$29.95
901539	1000	Ultra Sun™	MH1000W/LU	100,000	T-120	$97.95

RED-ENHANCED PERFORMANCE METAL HALIDE LAMPS

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
400 Watt Lamp						
901810	400	Sunmaster®	SM.400W.H37.WDX	38,000	ED-37	$72.00
1000 Watt Lamps						
901820	1000	Sunmaster®	M.1000W.U37.WDX	105,000	BT-37	$101.00
901825	1000	Sunmaster®	SM.1000W.H37.WDX	115,000	BT-37	$109.00
901830	1000	Sunmaster®	SM.1000W.BU37.WDX	115,000	BT-37	$109.00
902840	1000	SolarMax™	SolarMax™ Gold	100,000	T-25	$131.95

DUAL ARC TUBE LAMPS HPS & MH

These Dual Arc Tube lamps are designed to operate on HPS 1000 magnetic ballasts (S52), Galaxy or Lumatek electronic ballasts only.

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
NEW! 901546	1000	Ultra Sun™	LU1000MH/DA	110,000	ET-25	$109.95
902855	1000	Eye Hortilux™	LU1000MH/HTL/EN SUPER BLUE DUAL ARC	110,000	E-25	$219.95
902860	1000	Ushio	AMS1000 Dual Core	117,000	T-21	$199.95

MH CONVERSION LAMPS

OPERATE ON HIGH PRESSURE SODIUM BALLASTS

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
150-250 Watt Lamps						
901533	150	Ultra Sun™	MH150W/LU	13,000	ED-17	$29.95 NEW!
901543	250	Philips	CDM250S50/HOR/4K	20,500	ED-18	$66.95
400 Watt Lamps						
901551	400	Philips	CDM400S51/HOR/4K/ALTO	34,800	ED-18	$71.95
901840	400	Eye Hortilux™	M400LU/HTL	36,600	BT-37	$89.95
901860	400	Sunmaster®	LM.400W.U28.NDX	36,000	ED-28	$57.00
902915	400	Ushio	AMH400 Opti Blue	39,000	T-15	$95.95
600 Watt Lamps						
901537	600	Ultra Sun™	MH600W/LU	57,000	T-25	$97.95 NEW!
901868	600	Sunmaster®	LM.600W.U25.CDX	50,000	T-25	$107.00
902830	600	SolarMax™	Veg Conversion 7200°K	55,000	T-25	$128.95
902920	600	Ushio	AMH600 Opti Blue	47,000	T-25	$115.95
1000 Watt Lamps						
901539	1000	Ultra Sun™	MH1000W/LU	100,000	T-120	$97.95 NEW!
901865	1000	Sunmaster®	LM.1000W.U37.NDX	105,000	BT-37	$111.95
901867	1000	Sunmaster®	LM.1000W.U37.DDX	100,000	BT-37	$117.00
902825	1000	SolarMax™	Veg Conversion 7200°K	90,000	T-25	$131.95
902925	1000	Ushio	AMH1000 Opti Blue	109,000	T-25	$125.95

HPS CONVERSION LAMPS

OPERATE ON METAL HALIDE BALLASTS

Item No.	Lamp Watts	Brand	Description	Approx. Initial Lumens	Glass Size	MSRP
360 Watt Lamp						
901600	360	Eye Hortilux™	NH360HTL/EN	45,000	BT-37	$117.95
940 Watt Lamp						
901607	940	Eye Hortilux™	NHT940B/HTL/EN	130,000	E-25	$195.95

FLUORESCENT LAMPS

SPECTRALUX™ 2′ & 4′ T5 HO FLUORESCENT GROW LAMPS

Item No.	Description	Watt	Kelvin	Approx. Initial Lumens	MSRP
4 Foot Lamps					
901592	T5 54W HO Lamp - Red	54	3000°	5,000	$12.95
901589	T5 54W HO Lamp - Blue	54	6500°	5,000	$12.95
2 Foot Lamps					
901593	T5 24W HO Lamp - Red	24	3000°	2,000	$8.95
901594	T5 24W HO Lamp - Blue	24	6500°	2,000	$8.95

These high quality T5 HO lamps are excellent for all indoor gardening applications. Use the color of your choice for the growth phase of your plants. Mix and match for a full spectrum effect. For use with T5 HO fixtures. Do not use with VHO fixtures.

SPECTRALUX™ GREEN 2′ & 4′ T5 HO FLUORESCENT GROW LAMPS

Item No.	Description	Watt	Length	MSRP
901610	Spectralux™ Green T5 HO Lamp	54	4′	$13.95
901612	Spectralux™ Green T5 HO Lamp	24	2′	$11.95

These lamps illuminate green when turned on. They work great in our single lamp Sun Blaze® strip lights.

GE STARCOAT T5 HO FLUORESCENT LAMPS

Item No.	Description	Watt	Kelvin	Approx. Initial Lumens	MSRP
4 Foot Lamps - GE					
901587	F54 HO/54W/830 - Red	54	3000°	5,000	$15.95
901588	F54 HO/54W/865 - Blue	54	6500°	5,000	$15.95
3 Foot Lamp - GE					
901895	F39 HO W/T5/39W/865 - Blue	39	6500°	3,300	$15.95
2 Foot Lamps - GE					
901586	F24 HO/24W/865 - Blue	24	6500°	2,000	$14.95
901591	F24 HO/24W/830 - Red	24	3000°	2,000	$14.95

Use only these High Output (HO) lamps in Tek-Light™ T5, Sun Blaze®, Ready Fit® & New Wave® T5 fixtures. Lamps that are not marked HO will have significantly less output.

FLUORESCENT LAMPS

T5 VHO 4' SPECTRALUX FLUORESCENT GROW LAMPS

7,200 LUMENS
95 WATTS

Item No.	Description	Kelvin	Watt	Length	MSRP
901480	T5 VHO Red	3000º	95	4'	$15.95
901485	T5 VHO Blue	6500º	95	4'	$15.95

These T5 VHO (Very High Output) lamps are a brand new technology. T5 HO (High Output) lamps have an initial rating of 5,000 lumens. The new VHO lamps are 7,200 lumens.

Operate only with a VHO fixture such as the Solar Wind or Solar Flare.

T8 4' SPECTRALUX FLUORESCENT GROW LAMP

NEW!

Item No.	Description	Kelvin	Watt	Length	MSRP
901616	Spectralux T8	6500º	32	4'	$3.29

These daylight lamps are perfect for starting seeds and cuttings. They are the ideal lamp for the Spectra Lite Fluorescent fixtute (#960130).

- 2700 lumens.
- CRI-78.
- Horticultural spectrum.
- 1 year warranty.

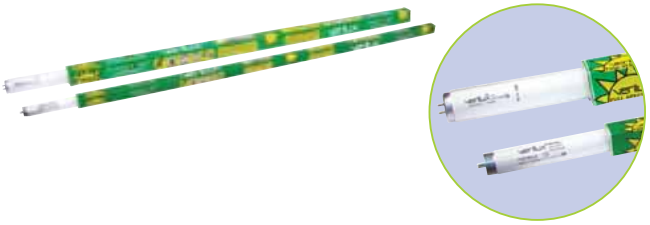
ECOLUX® 4' T8 GE FLUORESCENT GROW LAMPS

Item No.	Description	Kelvin	Watt	Length	MSRP
901598	4' T8 Fluorescent - 2 pack	6500º	32	4'	$7.49/2 pk

These "daylight" T8 HO lamps can be used in any standard T8 4' fixture.

- 2700 lumens
- CRI - 78
- Rated life - 20,000 hours
- Length - 48"

VERILUX® 4' T8 & T12 FLUORESCENT GROW LAMPS



Item No.	Description	Kelvin	Watt	Length	MSRP
901608	F32 T8 Sun	6280	32	4'	$17.95
901609	F40 T12 Sun	6280	40	4'	$17.95

Engineered to reproduce all the colors and balance of natural light, Verilux® full spectrum fluorescent tubes feature Trucolite Phosphor Technology™ which includes the use of a stable, custom blend of earth phosphors that create bright, balanced full spectrum light. CRI is 94.5. Rated lamp life is 26,000 hours. Three year warranty.

FELIZ™ "BLUE" & "RED" FLUORESCENT GROW LAMPS

FELIZ
FELIZLIGHT

industry exclusive

Item No.	Description	Kelvin	Watt	MSRP
901981	Feliz™ Blue Fluorescent Grow Lamp	125	6500º	$39.95
901983	Feliz™ Blue Fluorescent Grow Lamp	200	6500º	$79.95
901984	Feliz™ Blue Fluorescent Grow Lamp	250	6500º	$99.95
901991	Feliz™ Red Fluorescent Grow Lamp	125	2700º	$39.95
901993	Feliz™ Red Fluorescent Grow Lamp	200	2700º	$79.95
901994	Feliz™ Red Fluorescent Grow Lamp	250	2700º	$99.95

- Ideal for use with our Garden Bright and Bright Wing® fixtures.
- Proven success in high humidity.
- Designed for horticulture.
- Full Spectrum.
- Fits standard mogul base socket.
- Feliz Blue Lamp is a cool spectrum for vegetative growing.
- Feliz Red Lamp is warm spectrum for flower production.
- 6 month warranty.

GE SPIRAL FLUORESCENT BULB

This 42 watt soft white compact fluorescent bulb has the light output of a standard 150 watt incandescent bulb. It puts out 2700 initial lumens and a life span of 8000 hours. It will save energy and last 10 times longer than a 150 watt soft white light bulb.

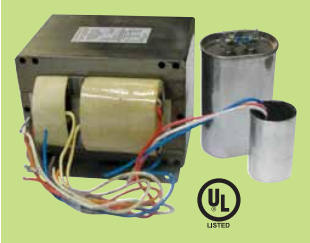
For use in medium base standard house hold lighting fixtures. Bulb is 8" tall and 3" diameter.

Item No.	Description	MSRP
901885	GE Compact Fluorescent 42 watt/2700K Bulb	$13.95

FRESH2 ODOR CONTROLLING FLUORESCENT BULB

A special coating of titanium dioxide is what gives fresh2 the ability to break down odors. When the surface of this coating is exposed to fluorescent light, a photocatalytic action occurs. This creates very strong oxidizers that completely break down odors. Purifying begins to work 10 minutes after the bulb is turned on. Use in standard medium base sockets (i.e. in a standard household lamp).

Item No.	Description	MSRP
901898	Fresh2 Bulb	$17.95



READY TO GROW™ HIGH PRESSURE SODIUM BALLAST KIT

Kit includes ballast, major brand high temperature capacitor, ignitor. Quad tap ballast will run on 120, 208, 240 or 277 volt power.

Item No.	Description	MSRP
902446	HPS 1000 - Ready to Grow™ Ballast Kit	$126.95

MAJOR BRAND BALLAST KITS (ADVANCE OR UNIVERSAL)

All H.I.D. (high intensity discharge) ballasts are quad-tap *(120V, 208, 240 & 277) and include the necessary capacitor and ignitor. The brand will be either Advance™ or Universal™. *Except 600 HPS–Tri Tap (120, 208, 240).

REPLACEMENT CAPACITORS

These capacitors are rated for 100° or 105° C temperature. The higher temperature rating means long lasting durability.

REPLACEMENT METAL HALIDE CAPACITORS

Item No.	Description	MSRP
902155	MH 100/175 - 10 MFD 400V	$33.95
902160	MH 250 - 15 MFD 400V & MH 100	$33.95
902165	MH 400 - 24 MFD 400V	$33.95
902170	MH 1000 - 24 MFD 480V	$33.95

REPLACEMENT HIGH PRESSURE SODIUM CAPACITORS

Item No.	Description	MSRP
902195	HPS 250 - 35 MFD 240V	$33.95
903000	HPS 400 - 55 MFD 240V	$33.95
903005	HPS 430 - 48 MFD 300V	$33.95
903010	HPS 600 - 64 MFD 280V (Single/dry)	$37.95
903015	HPS 1000 - 26 MFD 525V (Single/wet)	$37.95
903016	HPS 1000 - 52 MFD (Dual/dry) – 2 each needed for set	$37.95

REPLACEMENT METAL HALIDE BALLAST KIT

Item No.	Description	MSRP
902100	MH 175	$57.95
902105	MH 250	$77.95
902110	MH 400	$86.95
902115	MH 1000	$124.95

REPLACEMENT SWITCHABLE BALLAST KIT

Item No.	Description	MSRP
902146	400 Switchable	$184.95

REPLACEMENT HIGH PRESSURE SODIUM BALLAST KIT

Item No.	Description	MSRP
902120	HPS 150	$49.95
902125	HPS 250	$97.95
902130	HPS 400	$97.95
902140	HPS 600	$176.95
902145	HPS 1000	$157.95

REPLACEMENT HIGH PRESSURE SODIUM IGNITORS

Item No.	Description	MSRP
903025	HPS 250/400/430 - major brand	$33.95
903040	HPS 600 - major brand	$37.95
903045	HPS 1000 - major brand	$37.95
200931	HPS 250/400 - imported	$23.95
200933	HPS 600 - imported	$23.95
200930	HPS 1000 - imported	$23.95

T5 HO FLUORESCENT ELECTRONIC BALLASTS - ADVANCE/UNIVERSAL

Item No.	Description	MSRP
010499	2 x 24/39 watt	$49.95
010550	2 x 54 watt	$39.95
010555	4 x 54 watt	$66.95
010560	1 x 80 watt	$49.95

- Major brand electronic ballast.
- Small profile for easy installation.
- Easy Push-Lock wire systems.
- Requires grounded power cord.
- All ballasts are program start.
- Use non-shunted sockets.
- 50" leads.

T5 HO FLUORESCENT BALLASTS - FULHAM WORKHORSE

Item No.	Description	MSRP
010496	Workhorse 3	$24.95
010493	Workhorse 5	$32.95
010498	Workhorse 7	$57.95

DESCRIPTION	24 WATT	39 WATT	54 WATT	80 WATT
Workhorse 3	1-2	1	1	N/A
Workhorse 5	2-4	1-3	1-2	1
Workhorse 7	N/A	4	3-4	2

- Reliable, high output.
- Easy installation.
- Instant start ballasts.
- Use shunted sockets.
- 36" leads.

SOCKET ASSEMBLIES WITH LAMP CORD

Item No.	Description	MSRP
903055	Socket assembly w/ 15' lamp cord - 16 gauge	$28.95
903060	Socket assembly w/ 25' lamp cord - 14 gauge	$63.95

Use with all Sun System® reflectors that do not come standard with a socket. These sockets come with the patented male lamp receptacle which is compatible with all Sun System® ballasts.

- Flexible "pigtail" strain relief.
- 5kv mogul base socket.
- White powder coated junction box.
- Chrome "V" hanger for easy vertical hanging.

SOCKET MOGUL - 5KV

Item No.	Description	MSRP
903066	Socket only	$9.95

- Leviton brand.
- Position oriented to accept MH horizontal lamps.
- 5 KV Socket.
- Leads attached.

SOCKET ASSEMBLY WITH PIGTAIL STRAIN RELIEF

Item No.	Description	MSRP
903050	Socket assembly with pigtail strain relief	$21.95

- Our universal socket assembly is compatible with all of our reflectors and both MH & HPS lamps.
- We go the extra mile by offering 5KV/horizontal position oriented mogul base sockets.
- White powder coated junction box and cover.
- Includes strain relief, but not lamp cord.

SOCKET ASSEMBLY - 5KV SHORT

Item No.	Description	MSRP
903057	Short socket assembly with 15' lamp cord	$31.95

These are shorter than our extended sockets (#903055). Multipurpose socket used when a shorter socket is required.

POWER CORD & LAMP CORD WITH SOCKET

Item No.	Description	MSRP
903063	8' Power cord with mogul base socket	$12.49
903064	15' Lamp cord with mogul base socket	$22.49

- Flexible "pigtail" strain relief.
- 5kv mogul base socket.
- Aluminum socket cap.
- 8' power cord with socket for use with mogul based self-ballasted compact fluorescent lamps.
- 15' lamp cord with socket for use with all mogul based HPS & MH lamps (ballast required).

LAMP EXTENSION CORDS - 10'

Item No.	Description	MSRP
903245	10 foot Lamp Extension Cord - 16 gauge	$12.95
903247	10 foot Lamp Extension Cord - 14 gauge	$20.95

These cords plug into the female lamp cord receptacle on a Sun System® ballast then into the male plug on the lamp cord coming from the reflector. Allows a user to increase the distance between their ballast and reflector by 10'. Match cord gauge to your existing lamp cord gauge.

FEMALE RECEPTACLE FOR LAMP CORD

Item No.	Description	MSRP
903090	Replacement female receptacle	$5.95

Replacement lamp cord receptacle for all Sun System® ballasts. "Donkey Ear" flaps lock lamp cord in place. US Patent No: D543941.

STRAIN RELIEF & HEYCO REPLACEMENTS

Item No.	Description	MSRP
270060	Strain Relief - Pigtail	$2.49
270090	Strain Relief - Heyco	.49¢

TITAN CONTROLS® APOLLO 4™ - 120 VOLT IN-LINE TIMER

Item No.	Description	MSRP
734135	Titan Controls® Apollo 4™ - 120 Volt In-line Timer	$53.95

This product provides 24 hour lighting control for up to a 1000 watt ballast from a 120 Volt outlet.

The Apollo 4 is compatible with all 120 volt ballasts that feature a Smart Volt power cord. This includes: Sun System 1, 6 & 10, Harvest Pro, Harvest Pro Elite, Budget Gro, Galaxy and Lumatek ballasts. This timer makes lighting control simple!

- 24 hour lighting control.
- Non-detachable captive trippers are easy to set.
- Plastic cover keeps dust and moisture out of timer.
- Easy to understand & simple to use.
- Only the highest quality components are used.
- Controllers designed by our industry, for our industry.
- English and Spanish instructions.
- 13 Amps/120 Volt/60 Hz.
- 3 year warranty.

TITAN CONTROLS® APOLLO 5™ - 240 VOLT IN-LINE TIMER

Item No.	Description	MSRP
734140	Titan Controls® Apollo 5™ - 240 Volt In-line Timer	$57.95

This product provides 24 hour lighting control for up to a 1000 watt ballast from a 240 Volt outlet.

The Apollo 5 is compatible with all 240 Volt ballasts that feature a Smart Volt power cord. This includes: Sun System 1, 6 & 10, Harvest Pro, Harvest Pro Elite, Budget Gro, Galaxy and Lumatek ballasts. This timer makes lighting control simple!

- 24 hour lighting control.
- Non-detachable captive trippers are easy to set.
- Plastic cover keeps dust and moisture out of timer.
- Easy to understand & simple to use.
- Only the highest quality components are used.
- Controllers designed by our industry, for our industry.
- English and Spanish instructions.
- 13 Amps/240 Volt/60 Hz.
- 3 year warranty.

POWER CORDS - 30 & 50 AMP

Item No.	Description	Length	Gauge	MSRP
240370	30 amp power cord - Dryer with plug	6′	10	$15.59
350600	50 amp power cord (4 wire) with plug	4′	6	$29.95
903198	50 amp power cord - Range (3 Wire) with plug	6′	6/2-8/1	$19.95
903197	50 amp power cord with ring terminals	10′	8	$39.95
903199	50 amp power cord with ring terminals	25′	8	$69.95

POWER & LAMP CORDS

Item No.	Description	MSRP
903160	120 volt - 8 ft Power Cord	$6.95
903165	240 volt - 8 ft Power Cord	$12.95
903100	15 ft lamp cord - 16 gauge	$15.95
903105	25 ft lamp cord - 14 gauge	$36.95

LAMP CORD WITH MOLDED STRAIN RELIEF

Item No.	Description	MSRP
903102	15 ft lamp cord with molded strain relief - 16 gauge	$16.95

SMART VOLT™ POWER CORDS - 120 & 240

These power cords are compatible with all ballasts that feature Smart Volt™ power cords. This includes Sun System® 1, 6 & 10, Harvest Pro™, Harvest Pro™ Elite, Budget Gro™ II, Galaxy™ and Lumatek.

Item No.	Description	MSRP
903081	120 Volt - Smart Volt™ Cord - 6′	$6.95
903082	240 Volt - Smart Volt™ Cord - 6′	$9.95
903083	120 Volt - Smart Volt™ Cord - 20′	$16.95
903084	240 Volt - Smart Volt™ Cord - 20′	$19.95

EXTENSION CORDS - ECOPLUS® 120 & 240 VOLT

Item No.	Description	MSRP
903250	120 volt - 12 foot Extension Cord - 14 gauge	$16.29
903255	120 volt - 25 foot Extension Cord - 14 gauge	$21.95
903257	240 volt - 12 foot Extension Cord - 14 gauge	$21.95
903258	240 volt - 25 foot Extension Cord - 14 gauge	$38.95

Heavy duty, 14 gauge extension cords. Features a 3 outlet power strip. 120 or 240 volt grounded plugs.

RECEPTACLES - DUPLEX

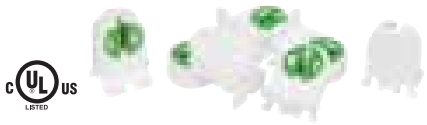
Item No.	Description	MSRP
350591	Receptacle - 120 volt/15 amp	$2.49
400021	Receptacle - 240 volt/15 amp	$6.95
400025	Receptacle Universal - 120/240 volt/15 amp	$6.95

NEOPRENE GASKET MATERIAL

Item No.	Description	MSRP
330135	Neoprene Gasket Material - 50 Ft Roll	$16.95

Replacement gasket material for hoods that have gaskets or upgrade your existing hood with this gasket material.

T5 HO REPLACEMENT SOCKETS



Item No.	Description	MSRP
220175	T5 Sockets - Non Shunted*	$1.25
220177	T5 Sockets - Shunted**	$1.25

* Program start ballasts require non-shunted sockets
** Instant start ballasts require shunted sockets

All Tek-Lights, New Wave® 42, 44, 48 have program start ballasts. New Wave® 22, 24, 28 and Sun Blaze® 22, 24, 44, 48 have instant start ballasts.

- Excellent quality, reliable socket.
- UL listed component.
- Rotate lamp 90˚ to lock in place.

T5 HO WATERPROOF REPLACEMENT SOCKET

Item No.	Description	MSRP
220205	Double Waterproof Socket	$3.95
220210	Cover	$1.49
220215	Gasket	.29¢

- Excellent quality, reliable socket.
- UL listed component.
- Rotate lamp 90˚ to lock in place.
- Purchase components a la carte.

PROGRIP™ LIGHT HANGERS - 1/8"

Item No.	Description	MSRP
710114	ProGrip™ Light Hanger 1/8" - **1 pair**	$18.95

ProGrip™ Light Hangers allow you to secure items quickly and easily. ProGrip's patented system pulls tight, locks in place, will never break or slip, and will not rust. Made with special composite material. Heat and cold resistant. 8' braided polypropylene rope. Carabiner clips provide a secure hold. Great for hoisting and securing:

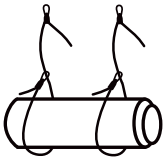
- Reflectors.
- Carbon Filters.
- Light Fixtures.
- Ventilation Equipment.
- Maximum weight capacity is 150 lbs. **a pair.**
- Excellent for use with our larger reflectors like the Magnum XXXL.

PROGRIP™ HEAVY DUTY LIGHT & EQUIPMENT HANGER - 1/4"

Item No.	Description	MSRP
710116	ProGrip™ Heavy Duty Light Hanger 1/4" - **1 ea**	$18.95

ProGrip™ Heavy Duty Light & Equipment Hangers allow you to secure items quickly and easily. ProGrip's patented system pulls tight, locks in place, will never break or slip, and will not rust. Made with special composite material. Heat and cold resistant. 8' braided polypropylene rope. Carabiner clips provide a secure hold. Great for hoisting and securing:

- Reflectors.
- Carbon Filters.
- Light Fixtures.
- Ventilation Equipment.
- Maximum weight capacity is 150 lbs. **each** (300 lbs. a pair).
- Excellent for use with heavier equipment like carbon filters or to hang multiple light fixtures.



Also works great for hanging carbon filters, ventilation equipment and much more.

PROGRIP™ REPLACEMENT ROPE

Item No.	Description	MSRP
710108	ProGrip™ 1/8" Rope 100 ft Roll	$11.49
710109	ProGrip™ 1/8" Rope 500 ft Roll	$56.49
710106	ProGrip™ Heavy Duty 1/4" Rope 100 ft Roll	$12.95
710107	ProGrip™ Heavy Duty 1/4" Rope 500 ft Roll	$64.95

If your application requires a rope longer than the standard 8' length, use these rolls to customize the length of your rope for your ProGrip™ Light Hangers. Also, if your original rope becomes warn, replace it with rope from these rolls to ensure your equipment is properly secured.

SUNLIFT™ - THE ORIGINAL

Item No.	Description	MSRP
710120	SunLift™ - 1 pair	$21.95

SunLift™ is a reflector suspension system which allows you to adjust the height of a hood in one simple movement. The tension mechanism will keep the hood in place once it is set at the desired height. The support strings pull out and retract like a yo-yo. A pair of SunLifts can support up to 22 lbs. Finally a simple way to raise a hood as plants grow! Maximum extension length is 4½ feet.

Features a Japanese made stainless steel, heavy duty spring. This premium quality product is superior to all other brands on the market. Competitive products are simply not as strong or reliable as the original SunLift™ brand.

GROW YO-YO

Item No.	Description	MSRP
710129	Grow Yo-Yo - 1 pair	$18.95

The Grow Yo-Yo allows the user to easily adjust the height of their reflectors as their plants grow. Also makes spraying or trimming your plants easy by being able to raise a reflector up and out of the way. Weight capacity is 22 lbs. per pair.

LIGHT HANGER

Item No.	Description	MSRP
710115	Light Hanger	$31.95

This light hanger allows you to raise and lower your reflector very easily. It operates similarly to your blinds at home. As your plants grow, you can easily raise the reflector to the desired height with a pull of the adjustment cord.

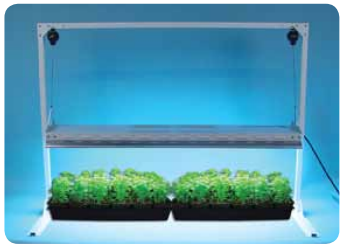
Maximum extension length is 14 feet. Maximum weight capacity is 40 lbs.

REFLECTOR HANGING HOOK

Item No.	Description	MSRP
430020	Reflector Hanging Hook	.99¢

This is a universal replacement "V" hanging hook for Sun System® Reflectors, New Waves, Tek-Lights, etc.

SUN STAND™ & SUN STAND™ EXTENSIONS



Item No.	Description	MSRP
710125	Sun Stand™ - Light hanger	$99.95
710127	Sun Stand™ Extensions	$29.95

- Powder coated heavy duty (16 gauge) steel construction.
- Includes 1 pair of SunLift's for use with 2 & 4 lamp T5 fixtures.
- 2 - 24" lengths of jack chain included for 6 & 8 lamp T5 fixtures.
- Designed to accommodate 2' or 4' T5 fixtures or any other fluorescent or HID reflector. Outside Dimensions: 53" L x 24" W x 36.6" H
- Easy to assemble stand.

Raise the height of your light stand by 24" by using our Sun Stand™ Extensions. Allows you to grow taller plants. Comes with all hardware needed.

NO HOLES BAR BASIC LIGHT STAND

Item No.	Description	MSRP
710170	No Holes Bar Basic Light Stand	$219.95

The No Holes Bar is a simple but very sturdy grow light stand that is designed for indoor flower / plant gardening and also works well in green houses. With this product any simple hydroponics systems can be transformed into a commercial hydroponics systems with only one rack and a 2 x 4 cut to desired length. There is no need to purchase special equipment, it can be utilized with many set-ups. The No Holes Bar Basic Model is great for bucket systems, or any system that does not require tray support.

The Basic model is a grow light rack/stand with only one 2 x 4 to hang your lights, fans, ventilation etc.

NO HOLES BAR COMPLETE LIGHT STAND

Item No.	Description	MSRP
710175	No Holes Bar Complete Light Stand	$329.95

The No Holes Bar is a simple but very sturdy grow light stand that is designed for indoor flower / plant gardening and also works well in green houses. With this product any simple hydroponics systems can be transformed into a commercial hydroponics systems with only one rack and a 2 x 4 cut to desired length. There is no need to purchase special equipment, it can be utilized with many set-ups.

The No Holes Bar Complete is not only a grow light stand but also an indoor grow rack that is fully adjustable in every direction. It comes with lower tray rack system, basic rack and lower cross support, and trellis brackets. The No Holes Bar Complete does not include the trellis wood, 2 x 4's, netting, and tray.

WIRE SUSPENSION HANGING KIT - 1 POINT CONNECTION

Item No.	Description	MSRP
750000	Wire Suspension Hanging Kit - 1 Point Connection (1 kit)	$27.95

This cable hanging system is perfect for securely hanging our new T5 Fluorescent Tek-Light™ fixtures - offering an attractive and clean appearance. In addition, they allow the user to easily adjust the fixture up & down. The "pem" bolts of the cable hangers screw into "pem" nuts in the top of the Tek-Light™ fixtures. The kit comes complete with 2 - 8' long stainless steel cables & all mounting hardware necessary to properly hang a Tek-Light™ from a ceiling or other support structure.

WIRE SUSPENSION HANGING KIT - 2 POINT CONNECTION

Item No.	Description	MSRP
750001	Wire Suspension Hanging Kit - 2 Point Connection (1 kit)	$29.95

This kit works great to hang a variety of different types of fixtures. It offers a two point connection which allows the user to balance a light fixture horizontally over their hydroponic system or tank by moving the adjustable connector left or right. This kit also fully adjustable vertically. Offers a clean attractive appearance. The kit comes complete with 2 - 8 foot long stainless steel cables & all mounting hardware necessary.

CEILING MOUNTING BRACKET - SMALL

Item No.	Description	MSRP
710160	Ceiling Mounting Bracket - Small	$8.29

This bracket kit allows the user to easily hang a lighting fixture from a ceiling. Mounting holes are 16" apart - the standard distance between studs. Mount the bracket to the ceiling with the included screws, then use the jack chain to hang your fixture over your garden. Bracket dimensions: 18" Long x 2½" Wide. Kit Includes: Aluminum bracket, support hooks with lock nuts, two - 2" mounting screws and two - 4' lengths of jack chain.

CEILING MOUNTING BRACKET - LARGE WITH 120 VOLT CORD

Item No.	Description	MSRP
710165	Ceiling Mounting Bracket - Large	$13.29

This unit is designed to be wired into a 120 volt ceiling power source (i.e. fan or light). Bracket is wired into the junction box, then the bracket is attached to the ceiling. Your new light fixture is then plugged into the 120 volt female receptacle on the bracket & hung from the hooks using jack chain. Bracket dimensions: 18" Long x 5¼" Wide. Kit Includes: 120 volt power cord with female end & strain relief, aluminum bracket with support hooks & lock nuts, two - 2" mounting screws, two - 4' lengths of jack chain and two wire nuts.

JACK CHAIN

Item No.	Description	MSRP
350205	Jack Chain - 100' Roll	.43¢/ft
350210	Jack Chain - 200' Roll	.40¢/ft

Heavy duty jack chain can be used for a variety of indoor gardening applications. Great for hanging:

- Reflectors
- Light fixtures
- Carbon filters
- Ventilation equipment

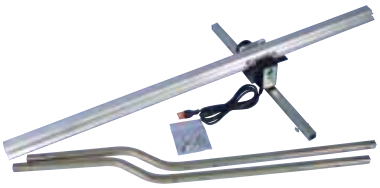
Specifications:

Zinc coated steel | Trade size: 12 | Working load: 29 lbs | Breaking load: 115 lbs

LIGHT RAIL 5 COMPLETE KIT

Item No.	Description	MSRP
710140	Light Rail 5 Complete - 4 RPM Kit	$449.95
710141	Light Rail 5 Motor Only - 4 RPM	$346.95

The new Light Rail 5 is extremely heavy-duty & functional. Great for multiple reflectors. 90+ lb. capacity if properly balanced. Comes complete with a high torque 4 RPM motor, adjustable crossbar and 8' rail. Features a limited lifetime warranty.



LIGHT RAIL 5 ACCESSORIES

Item No.	Description	MSRP
710145	Light Rail 5 Fore & Aft Crossbar Mounting Kit	$4.95
710146	Light Rail 5 Add-A-Bar Kit	$145.95
710147	Light Rail 5 - 4' Auxiliary Rail	$62.95

The Light Rail 5 Fore & Aft Crossbar Mounting kit allows the user to mount their crossbar and hang their lights in line with the rail.

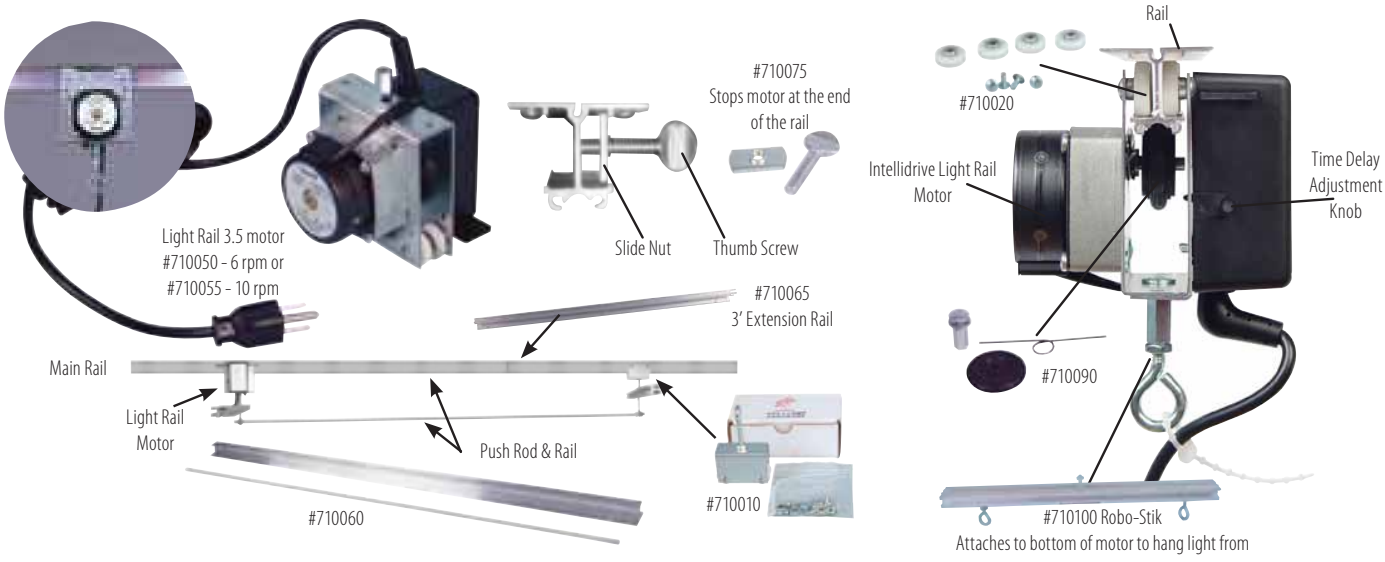
The Add-A-Bar kit includes Light Rail 5 trolley, crossbar, 4 foot push rod and all the hardware needed. Does not include 4' rail.

Extend your Light Rail 5 by 4 feet with this auxiliary rail.

LIGHT RAIL 3.5 COMPLETE KIT

Item No.	Description	MSRP
710130	Light Rail 3.5 Complete - 6 RPM Kit	$241.95
710135	Light Rail 3.5 Complete - 10 RPM Kit	$241.95

Rail & motor kit in one box - box dimensions: 41" x 6" x 5". Excellent for shipping or conserving space in your store.



LINEAR LIGHT MOVERS - LIGHT RAIL 3.5 A LA CARTE LIGHT RAIL COMPONENTS

Item No.	Description	MSRP
710050	6 RPM Intellidrive Light Rail 3.5 motor (no rail)	$210.95
710055	10 RPM Intellidrive Light Rail 3.5 motor (no rail)	$210.95
710085	6.5 Foot Rail	$27.95
710065	3 Foot Extension Rail	$16.95
710010	Add-A-Lamp Hardware Kit (NOTE: No rail or push rod)	$24.95
710060	6.5' Rail & Threaded Push Rod (NOTE: No hardware)	$36.95

Item No.	Description	MSRP
	NOTE: A complete Add-A-Lamp kit requires BOTH #710010 (1 ea) & #710060 (1 ea)	
710100	Robo-Stik Lamp Stabilizer	$31.95
710090	Drive Wheel Replacement Kit	$4.49
710020	Trolley Wheel Replacement Kit	$5.95
710075	Slide Nut with thumb screw	$1.25

Move your lights back & forth across your growing area with a light mover. Increase your coverage area! These motors offer a 0 - 60 second time delay. Two year warranty on 6 & 10 RPM 3.5 motors. Weight limit is 35 lbs.

FIRE EXTINGUISHERS

THE CHEAPEST INSURANCE POLICY YOU CAN BUY!

There are many electrical devices in todays indoor growing environments. Power strips, CO2 generators, heat mats, lights, light movers, reservoir heaters, fans , pumps, etc., can malfunction and cause a fire. Protect yourself, your growing environment and your home. Install a Flame Defender™ today!

Coverage Area:

4.4 lb (2 KG) = **4'** (1.24 meters diameter)

13.2 lb (6 KG) = **6'** (1.8 meters diameter)

26.4 lb (12 KG) = **7.7'** (2.3 meters diameter)

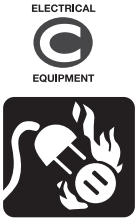
- Self contained – No plumbing or wiring required.
- Simply install by attaching vertically to the wall or ceiling.
- Automatic – extinguishing agent is automatically dispensed if the temperature probe on the unit reaches 155° F.
- Multi-purpose dry chemical extinguisher.
- Rated for A, B & C.
- Suitable for electrical fires.
- Discharges a hemispherical spray pattern in area under sprinkler.
- Available in three sizes to fit a variety of applications.

Go to YouTube to see the Flame Defender™ in action. Search: Flame Defender.

Class A extinguishers are for ordinary combustible materials such as paper, wood, cardboard, and most plastics. The numerical rating on these types of extinguishers indicates the amount of water it holds and the amount of fire it can extinguish.

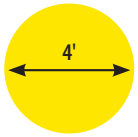
Class B fires involve flammable or combustible liquids such as gasoline, kerosene, grease and oil. The numerical rating for class B extinguishers indicates the approximate number of square feet of fire it can extinguish.

Class C fires involve electrical equipment, such as appliances, wiring, circuit breakers and outlets. Never use water to extinguish class C fires - the risk of electrical shock is far too great! Class C extinguishers do not have a numerical rating. The C classification means the extinguishing agent is non-conductive.



NEW!

Coverage Area:

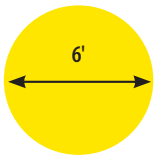


2 KG FLAME DEFENDER

Item No.	Description	MSRP
740702	4.4 lb/2 KG Flame Defender	$44.95

NEW!

Coverage Area:

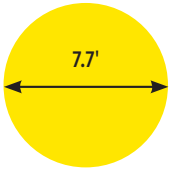


6 KG FLAME DEFENDER

Item No.	Description	MSRP
740706	13.2 lb/6 KG Flame Defender	$99.95

NEW!

Coverage Area:



12 KG FLAME DEFENDER

Item No.	Description	MSRP
740712	26.4 lb/12 KG Flame Defender	$149.95

PROFESSIONAL UV SAFETY GLASSES

- 100% UVA UVB Protection.
- Excellent for use around HPS & MH lights in grow rooms.
- Lightweight nylon frames.
- Scratch resistant polycarbonate lens.
- Wrap around protection with no side shield distortion.
- Adjustable temple for ultimate comfort.
- Meets ANSI Z87.1 National Safety Standards.

Item No.	Description	MSRP
708035	Professional UV Safety Glasses	$10.95

GENERAL HYDROPONICS®
Bringing Nature and Technology Together

Flora Series is the original 3-part Building-Block Nutrient System. It contains all Primary, Secondary and Micronutrients necessary for balanced plant nutrition, enhanced yields and superior crop quality. These nutrients form a complete and balanced fertilizer that provide plants with everything required to successfully build strong plant structures and big blooms. Flora Series is pH buffered.

FLORABLOOM® 0 - 5 - 4 & FLORAGRO® 2 - 1 - 6

Item No.	Description	Size	MSRP
718010	FloraBloom®	Quart	$12.50
718015	FloraBloom®	Gallon	$31.88
718020	FloraBloom®	2.5 Gallon	$69.40
718025	FloraBloom®	6 Gallon	$140.00
718040	FloraGro®	Quart	$12.50
718045	FloraGro®	Gallon	$31.88
718050	FloraGro®	2.5 Gallon	$69.40
718055	FloraGro®	6 Gallon	$140.00

Stimulates flower and fruit development. Enhances flavor, aroma and essential oils. Provides high Phosphorous, Potassium, Magnesium and Sulfur.

Stimulates structural and vegetative growth. Builds strong roots. Provides Nitrogen, Phosphorous, Potassium and secondary minerals.

FLORAMICRO® 5 - 0 - 1 & HARDWATER FLORAMICRO® 5 - 0 - 1

Item No.	Description	Size	MSRP
718120	FloraMicro®	Quart	$15.94
718125	FloraMicro®	Gallon	$36.58
718130	FloraMicro®	2.5 Gallon	$84.30
718135	FloraMicro®	6 Gallon	$170.00
718150	Hardwater FloraMicro®	Quart	$15.94
718155	Hardwater FloraMicro®	Gallon	$36.58
718160	Hardwater FloraMicro®	2.5 Gallon	$84.30
718165	Hardwater FloraMicro®	6 Gallon	$170.00

The foundation of the "building-block" system. Provides Nitrogen, Potassium, Calcium and trace elements. Combine with FloraGro® and FloraBloom®.

If your tap water is over 200 ppm (or contains Calcium above 70 ppm), use Flora Micro® Hardwater. If your water contains 30 to 50 ppm Calcium, you can mix our original Flora Micro® with Flora Micro® Hardwater to create a perfect Micro blend for your plants.

FLORANOVA™ represents a breakthrough in fertilizer technology, as it gives users both the strength of a dry concentrate and the ease of a liquid. This unique formulation of highly purified minerals and natural additives combines the benefits of both organic and soil-less gardening methods. Optimum nutrient absorption is aided by natural humic extracts for increased quality and superb yields. FloraNova is a one part formula that is pH stabilized and outstanding for all plant types.

FLORANOVA BLOOM® 4 - 8 - 7 & FLORANOVA GROW® 7 - 4 - 10

Item No.	Description	Size	MSRP
718810	FloraNova Bloom®	Quart	$27.50
718815	FloraNova Bloom®	Gallon	$87.50
718808	FloraNova Bloom®	2.5 Gallon	$192.50
718800	FloraNova Grow®	Quart	$27.50
718805	FloraNova Grow®	Gallon	$87.50
718807	FloraNova Grow®	2.5 Gallon	$192.50

FloraNova Bloom® promotes explosive flowering and fruiting. It induces phenomenal aroma, taste and colors while delivering extraordinary yields.

FloraNova Grow® works as a specialized nutrient for rapidly growing plants during the structural and foliar growth phase.

FLORALICIOUS™ is an organic based bio plant stimulant made from a highly concentrated blend of plant, marine plant and mineral extracts. Our unique fermentation process creates a potent blend of phytostimulants and biometabolic precursors that brings out the best in your plants. Floralicious stimulates Krebs cycle metabolism, facilitates mineral transport and aids bioconversion, all which are natural performance and quality determining functions. Floralicious contains a perfect balance of vitamins, phytohormones, humic acids, plant sugars, protein builders and flavor enhancers. Floralicious adds quality to the flavor and colors of all plants and can be used in all hydroponic and soil or soil-based growing environments.

FLORALICIOUS™ BLOOM 1 - 1 - 1 & FLORALICIOUS™ GROW 1 - .07 - 0.6

Item No.	Description	Size	MSRP
732185	Floralicious™ Bloom	Quart	$26.84
732190	Floralicious™ Bloom	Gallon	$80.50
732191	Floralicious™ Bloom	2.5 Gallon	$184.00
732200	Floralicious™ Grow	Quart	$26.84
732205	Floralicious™ Grow	Gallon	$80.50
732210	Floralicious™ Grow (SO)	2.5 Gallon	$184.00

FLORALICIOUS™ PLUS 2.8 - 0.8 - 0.02

Item No.	Description	Size	MSRP
732209	Floralicious™ Plus	Pint	$34.48
732206	Floralicious™ Plus	Quart	$60.90
732207	Floralicious™ Plus	Gallon	$212.76

Floralicious Plus is a vegan bio plant stimulator and nutrient additive. It is everything that is Floralicious except it has been formulated to be applied in both the vegetative and regenerative, or the flowering, stages of growth. It has five times the concentration and therefore its application rates are reduced. It also contains a dormant beneficial microbe that activates when it is introduced to a plants root structure. This metabolic fuel solution is packed with powerful vitamins, complex plant sugars, protein building amino acids, seaweed extracts, carbon building blocks and aromatic oils all in a fulvic acid base.

FLORA NECTAR - FRUIT INFUSION

Item No.	Description	Size	MSRP
732176	FloraNectar	Quart	$21.00
732177	FloraNectar	Gallon	$58.80
732178	FloraNectar	2.5 Gallon	$132.30
732179	FloraNectar	6 Gallon	$262.50

FloraNectar contains all natural raw cane sugar, molasses, malt syrup, select plant based esters, L-amino acids, organic acids, vitamins and essential minerals.

This unique blend of ingredients helps your plants regulate enzymes that trigger specific reactions involved in maintaining optimal metabolism. This allows your plants to achieve a balance between respiration and photosynthesis in high intensity growing environments where the rate of respiration can sometimes exceed the rate of photosynthesis.

FLORA NECTAR PINEAPPLE RUSH

Item No.	Description	Size	MSRP
732180	FloraNectar Pineapple	Quart	$21.00
732182	FloraNectar Pineapple	Gallon	$58.80

FloraNectar "PineappleRush" is the newest flavor by General Hydroponics. Infused with pineapple essence, your plants will get a sugar rush every time you use it!

- Optimizes the greatest transfer of sweetness and aroma into your fruits and flowers.
- Contains all natural raw cane sugar, molasses, malt syrup, select plant-based esters, L-amino acids, organic acids, polyflavonoids, vitamins and essential minerals.
- Promotes sturdier plant structure to support heavier yields during the vegetative phase when high levels of nitrogen are present.
- Balances rate of respiration and photosynthesis to ensure optimal metabolic rates occur during flowering and fruiting when nitrogen levels have been reduced.
- Fulfills the additional energy requirements of your plants throughout all phases of growth and during stressful times of transition.

FLORABLEND™ 0.5 - 1 - 1

Item No.	Description	Size	MSRP
732211	Florablend™	Quart	$12.00
732212	Florablend™	Gallon	$30.00
732213	Florablend™	2.5 Gallon	$70.00
732214	Florablend™	6 Gallon	$144.00

FloraBlend is a Vegan Plant Booster that is made from a proprietary blend of plant materials, plus seaweed, rock powders and micronized leonardite. It is produced with a diverse mixture of highly bioactive microorganisms that are fed a feast of select food sources in a hyper oxygenated environment. These beneficial microorganisms multiply rapidly consuming these food sources and through bioconversion processes, new organic compounds are formed. These highly soluble organic compounds increase and promote healthy root structures, build the plants immune system and provide carbon building blocks for plant processes responsible for color and flavor of fruits and vegetables.

FLORASHIELD®

Item No.	Description	Size	MSRP
704030	FloraShield®	Quart	$28.75
704035	FloraShield®	Gallon	$80.50

Maintain healthy roots without resorting to harsh, toxic chemicals. FloraShield's unique combination of compounds can thoroughly rinse systems and plants during all phases of the life cycle. FloraShield is safe to use on and around actively growing plants at all stages of growth. Growers across the globe have attested to FloraShield's ability to solve root problems.

FLORAKLEEN™

Item No.	Description	Size	MSRP
732915	FloraKleen™	Quart	$9.78
732920	FloraKleen™	Gallon	$23.00
732925	FloraKleen™	2.5 Gallon	$54.66

FloraKleen™ removes fertilizer residues that can accumulate over time in hydroponic systems, growing media, and potting soils. Use FloraKleen™ monthly to purge your hydroponic system or potted plants of excess salts that can accumulate as a result of regular fertilizer application. FloraKleen™ is an excellent final flush, and can be used at any time to dissolve mineral and salt buildup. Its high concentration and low price make FloraKleen™ the economical choice for maintaining your plants in both hydroponic and soil-based environments.

DIAMOND NECTAR™ 0 - 1 - 1

Item No.	Description	Size	MSRP
732160	Diamond Nectar™	Quart	$17.25
732165	Diamond Nectar™	Gallon	$46.00
732170	Diamond Nectar™	2.5 Gallon	$92.00
732175	Diamond Nectar™	6 Gallon	$184.00

ORGANIC

Diamond Nectar accelerates nutrient absorption where mineral foods enter the plant. Diamond Nectar applies the chelating action of fulvic acids to nutrient rich hydroponic environments by grabbing immobile and molecularly heavy compounds. They are transported through and into plant tissues for faster growth and greater yields. Diamond Nectar supercharges your nutrients in order to optimize the health of your plants and the quality of your crops.

SUBCULTURE® M

Item No.	Description	Size	MSRP
722152	SubCulture® M	150g	$39.98
722153	SubCulture® M	300g	$69.95

ORGANIC

SubCulture-M, Mycorhizae Root Inoculant contains a wide diversity of endo and ecto mycorrhizal fungi that colonize plant roots. These beneficial fungi form a fine network of fibrous strands that serve as an extension of the plants root system; increasing root area and helping plants absorb water and nutrients. Use SubCulture-M from germination or propagation all the way through harvest. Reduce the amount of fertilizer and still achieve superior growth and huge yields.

SUBCULTURE® B 0.1 - 0.04 - 0.02

Item No.	Description	Size	MSRP
722150	SubCulture® B	150g	$39.98
722151	SubCulture®B	300g	$69.95

ORGANIC

SubCulture-B is a probiotic inoculum of beneficial microorganisms that will increase the vitality and yield in all plants. Whether in soil or hydroponics, our proprietary blend of bacteria and trichoderma fungi colonize the root zone and media to form a symbiotic relationship with your plants. Root systems will increase, as well as nutrient absorption; thus creating bigger, healthier plants.

SPIGOT FOR 6 GALLON CONTAINERS

Item No.	Description	MSRP
718445	GH - Spigot for 6 Gallon container	$3.50

For use with all General Hydroponics® 6 gallon containers.

KOOLBLOOM™ 2 - 45 - 28

Item No.	Description	Size	MSRP
732531	KoolBloom™	2.2 lb	$29.40

KoolBloom is a highly concentrated nutrient supplement that promotes abundant flowering and facilitates ripening in annual flowers and herbs. KoolBloom is rich with phosphorus and potassium and contains precise amounts of ripening elements. KoolBloom is to be used only at the very end of a plants life cycle and will help build larger, heavier fruits and flowers.

LIQUID KOOLBLOOM™ 0 - 10 - 10

Item No.	Description	Size	MSRP
732537	Liquid KoolBloom™	Quart	$21.76
732538	Liquid KoolBloom™	Gallon	$63.50
732539	Liquid KoolBloom™	2.5 Gallon	$136.30
732541	Liquid KoolBloom™	6 Gallon	$305.50

Liquid KoolBloom is a flowering nutrient supplement that goes way beyond other bloom boosters. Enriched with stress reducing vitamins and nutrient transporting acids, Liquid KoolBloom provides the essential nutrients needed by plants to initiate explosive flowering and build bigger blooms. Liquid KoolBloom promotes heavy production of essential oils and increases fruit and flower development without damaging young and delicate root systems.

Start using liquid KoolBloom during the transitional period between vegetative growth and fruit or flowering stage to take advantage of its unique characteristics and bloom builders.

MAXIGRO™ and MAXIBLOOM™ are stand-alone, water-soluble, dry concentrate nutrients. Complete in Primary, Secondary, and Micronutrients, pH buffered MaxiGro and MaxiBloom will provide superior results when used with a wide variety of crops in all hydroponic and soil or soil-based growing environments.

MAXIGRO™ 10 - 5 -14 & MAXIBLOOM™ 5 - 15 - 14

Item No.	Description	Size	MSRP
718301	MaxiGro™	2.2 lb	$15.34
718310	MaxiGro™	16.0 lb	$118.00
718281	MaxiBloom™	2.2 lb	$15.34
718290	MaxiBloom™	16.0 lb	$118.00

Use to encourage growth of seedlings and cuttings, and to stimulate rapid growth through the "vegetative" growth stage.

Use for the reproductive stage in fast growing annuals. MaxiBloom™ encourages prolific flowering and fruiting, and increases yields and crop quality.

GENERAL ORGANICS®

BIO THRIVE GROW 4 - 3 - 3 & BIO THRIVE BLOOM 2 - 4 - 4

Item No.	Description	Size	MSRP
726800	BioThrive Grow	Quart	$16.98
726802	BioThrive Grow	Gallon	$49.98
726804	BioThrive Grow	2.5 Gal	$104.98
726810	BioThrive Bloom	Quart	$16.98
726812	BioThrive Bloom	Gallon	$49.98
726814	BioThrive Bloom	2.5 Gal	$104.98

ORGANIC

BioThrive Grow is pure, natural nutrition for plants grown in soil or soilless mediums. Its vegan formula facilitates lush vegative growth and vigourous root development. It provides necessary organic elements needed for plant growth and strength in the vegetative stage.

BioThrive Bloom is formulated to provide blooming plants with essential elements needed for superior blooms and harvests. The vegan formulation is pure and natural from organic sources. BioThrive Bloom promotes massive flowers and fruit and also encourages microbial activity in the growing media. It is ideal for both potting soil and soilless growing.

CAMG+

Item No.	Description	Size	MSRP
726820	CaMg+	Quart	$16.98
726822	CaMg+	Gallon	$49.98

ORGANIC

CaMg+ is derived from all natural sources, not calcium nitrate. It must be added in conjunction to make calcium available to plants grown hydroponically. Calcium is an essential element that plants use to building strong healthy cell walls. Thus, it also promotes disease resistance. In general, it is a great supplement containing additional minerals necessary for structure.

BIO ROOT 1 - 1 - 1

Item No.	Description	Size	MSRP
726824	BioRoot	Quart	$16.98
726826	BioRoot	Gallon	$49.98

ORGANIC

BioRoot is a natural plant growth supplement that helps plants establish healthy and vibrant root systems. It contains plant- and mineral-derived organic acids and humates that encourage beneficial microbial activity in the root zone. BioRoot is outstanding for seedlings and cuttings as well as all phases of plant growth. Use BioRoot with all types of plants growing in all kinds of garden soils and potting mixes. It works in harmony with the superior plant nutrition of the General Organics BioThrive Grow and Bloom.

BIO BUD 0.5 - 0.1 - 1

Item No.	Description	Size	MSRP
726828	BioBud	Quart	$37.00
726830	BioBud	Gallon	$137.00

ORGANIC

BioBud provides flowering plants with minerals, humates, and amino acids. It encourages profuse and abundant flowering and fruit production. BioBud works in harmony with General Organics BioThrive Bloom fertilizer as a bloom enhancer.

BIO WEED 0.2 - 0 - 0.3

Item No.	Description	Size	MSRP
726832	BioWeed	Quart	$16.98
726834	BioWeed	Gallon	$49.98

ORGANIC

Seaweed is packed with nutriton that we make accessible to your plants. BioWeed builds healthy plants and contributes to dark green leaves and lush growth. It also builds soil composition. Enhancing the soil, instead of just diminishing it is a principle in organic farming that is very important to us. The General Organics line does that using sustainable, renewable, natural, sources like seaweeds.

BIO MARINE 2 - 3 - 1

Item No.	Description	Size	MSRP
726836	BioMarine	Quart	$16.98
726838	BioMarine	Gallon	$49.98

ORGANIC

BioMarine is an enzymatically extracted fish protein that naturally enhances soils and boosts plant growth. This fish-based fertilizer encourages beneficial microbes for better roots, stems, foliage, flowers, and fruits. A superior natural source of plant nutrition, Bio Marine suits all types of plants during all phases of growth, from seedling through harvest.

DIAMOND BLACK 0 - 0 - 1

Item No.	Description	Size	MSRP
726840	Diamond Black	Quart	$16.98
726842	Diamond Black	Gallon	$49.98

ORGANIC

Diamond Black is derived from 100% pure mined Leonardite, a naturally occurring form of carbon drawn from prehistoric peat bogs. Containing an exceptionally high percentage of plant-active humates, Diamond Black supports beneficial microbial activity in soils and increases micronutrient availability. Diamond Black can be added to all kinds of garden soils and potting mixes, and used with a wide variety of plants during all phases of growth.

FLOWER DRAGON 0 - 0.15 - 0.30

Item No.	Description	Size	MSRP
719976	Flower Dragon	34 oz.	$119.95
719978	Flower Dragon FL Label	34 oz.	$119.95

NEW!

industry exclusive

Flower Dragon is a new generation of flower booster, with an added bonus. Rather than just piling on extra phosphorus and potassium through the flowering stage and hoping for the best, Flower Dragon also enhances a plant's ability to absorb and utilize these essential elements.

Flower Dragon works with plants to maximize their sensitivity and responsiveness to environmental cues (typically changes in photoperiod). As a result, plants are better able to quickly and effectively absorb the phosphorus and potassium they need during the all-important flowering stage enabling them to minimize the time taken to shift into flower - ensuring maximum results. For more information log onto www.flower-dragon.com.

BLOOMBASTIC®

Item No.	Description	Size	MSRP
732489	Bloombastic® West Label	80 ml	$29.95
732486	Bloombastic® East Label	80 ml	$29.95
732488	Bloombastic® FL Label	80 ml	$29.95
732500	Bloombastic® West Label	325 ml	$89.95
732504	Bloombastic® East Label	325 ml	$89.95
732502	Bloombastic® FL Label	325 ml	$89.95
732580	Bloombastic® West Label	1250 ml	$209.95
732506	Bloombastic® East Label	1250 ml	$209.95
732581	Bloombastic® FL Label	1250 ml	$209.95
732582	Bloombastic® West Label	5.5 L	$879.95
732589	Bloombastic® East Label	5.5 L	$879.95
732583	Bloombastic® FL Label	5.5 L	$879.95

- There will also be an increase in essential oils.
- Bloombastic simulates the enzyme process which will make your plant less sensitive to stress factors such as: heat, dry air, high light levels, diseases and nutrient deficiencies.
- Ensures shorter flowering/ripening stage. Results are visible within 5 to 7 days.
- Okay to use with carbohydrates as long as not a high in PK.
- Bloombastic contains at least 50% more phosphorus and potassium than competitive bio-stimulants.
- Contains sea kelp and clay minerals that make it organic based. Delivers a healthy consuming end product.
- Bloombastic is suitable for all substrates and can be used in hydroponic, soil and coco applications.

- All bloom additives in one bottle: booster, accelerator, hardener & flower enhancer.
- Bloombastic is highly concentrated.
- Bloombastic stretches the flower cell, increasing intake capacity of potassium.
- Bloombastic triggers the sugar and bloom production.
- It creates more compact and heavier blooms compared to competitive products.

industry Exclusive

BLOOMBASTIC MAGIC!!!
Bloombastic is the most complete Bloom Stimulator on the market today. This one bottle wonder will transform your garden by elevating its overall quality and yield. The Bloombastic formula is a synergy of two very different sciences. Bloombastic is a highly concentrated pure mineral PK boost as well as a cutting edge plant metabolic booster.

Bloombastic is engineered to stimulate enzymatic processes on several levels increasing your plant's resistance to stress factors such as: heat, dry air, high light intensity, disease and nutrient deficiencies. Bloombastic will elevate the performance of any brand of base nutrient transforming you into a Master Gardener.

STANDARD USE
Start with 2 ml per gallon of nutrient solution. In the final 4 weeks of the bloom cycle increase usage to 4 ml per gallon of nutrient solution. Do a good flush before you up the does to 4ml per gallon.

BioAg

industry Exclusive

BIOAG FUL-POWER

Item No.	Description	Size	MSRP
719770	BioAg Ful-Power	Quart	$19.95
719775	BioAg Ful-Power	Gallon	$49.95
719777	BioAg Ful-Power NEW!	2.5 Gallon	$109.95

ORGANIC

We now have available the most effective humic acid product you will find anywhere. Our Cold Microbial Extraction Process mimics earths' natural processes resulting in an organic humic with high bioavailability, primary and secondary metabolites as well as phytostimulants from the "fermentation" process. The purified humic acid in Ful-Power has superior chelating ability and can help optimize cellular/plant growth, increase yields, and builds root mass and overall plant health/immunity. Humic complexes enhance both mineral and trace element uptake in plants without inducing toxicity. It also prevents nutrients from binding in solution and creating insoluble precipitates.

BIOAG HUMISOLVE

Item No.	Description	Size	MSRP
719740	BioAg Humisolve	100g	$11.95
719745	BioAg Humisolve	300g	$24.95
719746	BioAg Humisolve	1.5 lb	$44.95

ORGANIC

Our low heat capacity drying method provides a natural, easy to use humic concentrate with a high bio-stimulation effect. HumiSolve is an inexpensive plant and soil activator that increases cellular activities at all levels, increases availability of nutrients, converts raw organic matter faster and detoxifies plant cells. In the root system HumiSolve reduces the uptake of sodium, aluminum and other metals that negatively effect plants. HumiSolve will also buffer the soil with organic biopolymers, thus preventing tie up of nutrients and trace elements. HumiSolve is a soluble product that comes in dry powder form for easy long-term storage (liquid humates degrade over time).

BIOAG TM-7

Item No.	Description	Size	MSRP
719750	BioAg TM-7	100g	$14.95
719755	BioAg TM-7	300g	$27.95
719756	BioAg TM-7	1.5 lb	$54.95

ORGANIC

All the power of HumiSolve humic acid, plus seven micronutrients required for plant growth. The natural humic acid act as chelating agents and prevent tie-up of the trace elements, as well as supplying natural root stimulating compounds. Increases fruit set and quality, stimulates soil microbial activity, improves soil tilth, increases trace element levels and reduces water use. A soluble dry powder for easy long term storage. Use in a wide variety of applications including dry broadcast for turf and farms, or add to liquid for foliar, hydroponic, irrigation, and hand watered applications.

BIOAG CYTOPLUS

Item No.	Description	Size	MSRP
719760	BioAg CytoPlus	100g	$15.95
719765	BioAg CytoPlus	300g	$29.95
719766	BioAg CytoPlus	1.5 lb	$59.95

ORGANIC

A combination of soluble seaweed extract, HumiSolve and seven micronutrients required for plant growth. Applied as a foliar spray on fruit, flowers and vegetables just prior to bloom or bud stage, it will enhance flowering and fruit set quality, quantity and retention. It will also provide greater nitrogen uptake resulting in a lush, dark green color and a healthier root system from increased photosynthesis. Cytoplus can also be applied to plants during the growing season to quickly correct micronutrient deficiencies and improve overall plant health. Provides a large profile of essential and rare elements; as well as phytostimulants in small quantities. Cytoplus is a soluble, dry powdered concentrate.

Higrocorp

ORGANA-ADD™ 2 - 0 - 0

Item No.	Description	Size	MSRP
719710	Organa-Add™	Quart	$19.95
719715	Organa-Add™	Gallon	$68.95

ORGANIC

OMRI™ Listed

Organa-Add™ functions as a growth and bloom catalyst containing all necessary organic activators. Adding the product to your regimen will increase the production of essential oils improving overall quality while maximizing your yield. A balanced formula of vitamins, amino acids, carbohydrates, proteins and organic chelates. Organa-Add™ should be used for the duration of your crops cycle to ensure explosive growth. To increase absorption rates of amino acids, this completely solubilized liquid can also be foliar sprayed. Organa-Add™ is super concentrated at 1 teaspoon for 5 gallons and should be used in conjunction with your favorite fertilizer.

ORGANA-GUANO™ 0 - 4 - 0

Item No.	Description	Size	MSRP
719720	Organa-Guano™	Quart	$19.95
719725	Organa-Guano™	Gallon	$68.95

ORGANIC

OMRI™ Listed

Organa-Guano™ is a natural organic flowering stimulant derived from fruit eating bats. Organa-Guano™ functions as a flowering catalyst containing all necessary organic activators. The completely solubilized liquid contains the highest rate of phosphorus without the addition of synthetics. The use of a liquid guano is three times more cost effective and concentrated as compared to powder. The organic liquid form of phosphorus is easily absorbed, stimulates early flowering, contains beneficial enzymes, increases number of branches/flower sites, enhances aroma and improves taste. The formula is non burning and contains no odor or harmful residue. Organa-Guano™ is user friendly and any grower can achieve exceptional results.

PURE FLOWERS 0 - 30 - 20

Item No.	Description	Size	MSRP
719700	Pure Flowers	Quart	$28.95
719705	Pure Flowers	Gallon	$88.95

Pure Flowers liquid was scientifically formulated with cutting edge phosphite technology. Pure Flowers 0-30-20 has the highest nutrient levels ever achieved in a completely solubilized liquid. The unique molecular structure of a phosphite is easily absorbed through the roots and leaves ensuring the crop instantly uptakes potassium and phosphorus. The ultimate flowering supplement will maximize your crops yield and boost the crops immune system. The immune system will then be able to better resist powdery mildew, brown rot and other harmful fungi. While protecting it also accelerates flower development and increases yields. Developed for hydroponics and soilless gardening, Pure Flowers is super concentrated at 1 teaspoon for 5 gallons. The liquid formulation is easy to use in reservoirs, drench and foliar.

Nature's Nectar

industry Exclusive

Nature's Nectar™ is the worlds first all natural certified organic nutrient that is compatible with hydroponics, soil, coco gardening and drip irrigation. Nature's Nectar™ has also been approved by the Organic Materials Review Institute (OMRI) for food crop production. This ensures that this concentrated formula and its components are certified organic. Nature's Nectar™ is the leading natural organic nutrient in commercial food and fruit production. Nature's Nectar™ solution contains no sediment and has been manufactured so all nutrients are instantly available to your plant. Nature's Nectar™, for exceptional growth, quality and yield. Please view www.organaponics.com for amazing photos, test results and detailed information for this exceptional line of products.

NATURE'S NECTAR™ NITROGEN 5 - 0 - 0

Item No.	Description	Size	MSRP
719870	Nature's Nectar™ Nitrogen	Quart	$17.99
719875	Nature's Nectar™ Nitrogen	Gallon	$49.99
719878	Nature's Nectar™ Nitrogen (Special Order)	55 Gal	$1999.95

ORGANIC

OMRI™ Listed

- Completely solubilized, instantly available source of nitrogen with no sediment.
- 13% of the formula contains 21 free amino acids.
- Provides nutrition for beneficial bacteria improving conditions of growing medium.
- Increases photosynthesis for a greener plant.

NATURE'S NECTAR™ PHOSPHORUS 0 - 4 - 0

Item No.	Description	Size	MSRP
719880	Nature's Nectar™ Phosphorus	Quart	$17.99
719885	Nature's Nectar™ Phosphorus	Gallon	$49.99
719888	Nature's Nectar™ Phosphorus (Special Order)	55 Gal	$1999.95

ORGANIC

OMRI™ Listed

- Completely solubilized phosphorus source that also contains Calcium.
- Organic acid ensures phosphorus is easily absorbed.
- Adds size and weight to fruit and flowers.
- Aids in root development.

NATURE'S NECTAR™ POTASSIUM 0 - 0 - 5

Item No.	Description	Size	MSRP
719890	Nature's Nectar™ Potassium	Quart	$17.99
719895	Nature's Nectar™ Potassium	Gallon	$49.99
719898	Nature's Nectar™ Potassium (Special Order)	55 Gal	$1999.95

OMRI™ Listed

ORGANIC

- Fast release potassium completely solubilized.
- The potassium source also contains cytokinins to increase number of flower sites.
- Simple and complex carbohydrates.
- Alginic acid ensures translocation of potassium into plant.
- Builds plants immune system with a combination of sea kelp species.

Nature's Nectar

COMMERCIAL APPLICATION

This product has been thoroughly tested by the Harrow Research Center in Harrow, Ontario. Harrow is a well respected national network of 19 centers dedicated to agriculture and food crops. As Canada's premier horticulture testing facility, scientist have run very successful trials on tomatoes with Nature's Nectar™ using hydroponics. See picture of the test results below.

NO pH ADJUSTMENT NECESSARY!

HOBBY APPLICATION

We have conducted our own tests with Nature's Nectar™ as well. We grew tomatoes in a Sun Hut™ using a 1000 HPS light system in a 4" Yield Master reflector. The container is an Autopot. The amount of fruit produced was simply amazing! The tomatoes were the best tasting, most flavorful tomatoes we have ever had. Nature's Nectar™, is a revolutionary introduction to hobby gardening. We guarantee you will be thrilled with the results of this 100% organic, OMRI listed, fertilizer program.

VERMICROP ORGANICS

industry exclusive

VERMI T 5/10 EXTRACTOR

Item No.	Description	Size	MSRP
720720	Vermi T 5/10 Extractor	26" x 18" x 13"	$449.99

This new light weight, easy to clean Bio Extractor is designed to produce a fresh microbial rich extract in 24 hours. This new revolutionary process is used to multiply beneficial micro organisms through the recirculation and injection of highly aerated water into a Vermi T Bio-cartridge. Typically compost tea must be used immediately after brewing. Unlike traditional compost tea, Vermi T will maintain 100% viability for 7-10 days if properly refrigerated.

VERMILOGIC™ WATER PURIFICATION SYSTEM

Item No.	Description	MSRP
720722	VermiLogic Water Purification System	$84.99

The VermiLogic Water Purification system was specifically designed by HydroLogic for the Vermicrop Organics 5/10 extractor. This unit instantly reduces Chlorine/Chloramine and Sediment making tap water ideal for the extraction process. This unit is also ideal for filling up reservoirs or making city water taste great! This filter lasts for up to 1000 gallons before it has to be replaced. There's no waste water just hook it up to your standard household faucet and you're good to go!

VERMI T BIO-CARTRIDGES

Item No.	Description	Size	MSRP
720725	Vermi T Bio-Cartridge	5 gallon	$84.99
720740	Vermi T Bio-Cartridge	10 gallon	$149.99

ORGANIC

This Cartridge is the key to the multiplication of a diverse microbial rich solution from your Vermi T 5/10 Extractor.

720725

720740

VERMI T SOLUTION 1/2 GALLON

Item No.	Description	MSRP
	Vermi T Microbial Solution - 1/2 Gallon	$11.99

This freshly extracted microbial rich solution concentrate is brewed fresh by your local retailer. Typically compost tea must be used immediately after brewing. Unlike traditional compost tea, Vermi T will maintain 100% viability for 7-10 days if properly refrigerated. Check with your local retailer for availability.

ORGANIC

Plant Marvel

Established in 1922, Plant Marvel Laboratories pioneered the commercial fertilizer market with its concept of a water-soluble fertilizer... one which delivered a total nutrient feed to crops and turf without the fear of burning and with unparalleled ease of application.

Over the years, the list of horticultural firsts from Plant Marvel Laboratories continues to grow.

- First to produce a high-concentrate, economical water-soluble fertilizer.
- First to incorporate readily available minor elements in a highly soluble form.
- First with a starter solution for faster development of newly seeded areas.
- First to promote various formulas specifically designed for the changing needs of plants at different stages in their development.
- First to develop spoon-feeding® methods of fertilization and to develop fertilizers for it.
- First to develop fertilizers especially for specific varieties.
- First to develop fertilizers that contain N P K with trace elements including calcium and magnesium.

Today, Plant Marvel Laboratories' commitment to research and pioneering firsts continues. Growers across the nation know that this commitment assures highest quality in every Plant Marvel Nutriculture formulation.

Over seventy five years of experience and research... it builds confidence in our products and helps insure better crops and easier crop maintenance.

PLANT MARVEL CAL MAG SPECIAL 15 - 3 - 18

Item No.	Description	Size	MSRP
720005	Plant Marvel Cal Mag Special	5 lb	$14.99
720007	Plant Marvel Cal Mag Special	25 lb	$46.99

Cal-Mag Special 15-3-18 contains Calcium, Magnesium and a very high ratio of Nitrogen in the preferred nitrate form. The nitrate will produce good, hard growth, while the phosphorous levels will keep growth short and compact between leaf nodes. The stepped-up amount of potash will insure good and healthy cell wall development. • High Nitrate N with Ca, Mg and P. • Stiffen Stems.

PLANT MARVEL ALL PURPOSE 20 - 20 - 20

Item No.	Description	Size	MSRP
720000	Plant Marvel All Purpose	5 lb	$14.99
720002	Plant Marvel All Purpose	25 lb	$59.99

All Purpose 20-20-20 provides over 60% nutrient value in a 1-1-1 ratio which makes it suitable for general use in a wide variety of growing situations. It is widely used on containerized stock in the nursery industry and for greenhouse crops such as foliage plants and bedding plants. For institutional and general landscape maintenance, it is ideal because it works well on turf, trees or shrubs as well as blooming plants and can be used as a single all purpose spray feed. • NPK and trace elements all in one mix. • Fully Chelated Minors.

PLANT MARVEL BLOSSOM BOOSTER 5 - 50 - 17

Item No.	Description	Size	MSRP
720015	Plant Marvel Blossom Booster	5 lb	$19.99
720017	Plant Marvel Blossom Booster	25 lb	$76.99

Blossom Booster & Starter 5-50-17 is ideal for forcing blossoms and as a starter solution which promotes faster root development on seeds and transplants, without burning. Starter Solution: A one time application for watering in seedlings and transplants use 3 lbs. of Blossom Booster 5-50-17 in 50 gallons of water. For smaller quantities, dissolve 2 tablespoons in one gallon. Keep seeded areas moist until germination. • Promotes prolific blooming. • Establishes seed and seedlings fast.

PLANT MARVEL BLOOM SPECIAL 3 - 15 - 26

Item No.	Description	Size	MSRP
720010	Plant Marvel Bloom Special	5 lb	$17.29
720012	Plant Marvel Bloom Special	25 lb	$67.99

Only the finest quality ingredients are used to make the Plant Marvel Bloom Special 3 - 15 - 26. This formulation will generally be used towards the end of your crops growth cycle. It is completely soluble and can be used in hydroponic reservoirs as well as drip lines & drench irrigation methods. This nutrient works extremely well for transitioning plants to flowering cycle using eleven high quality elements with increased iron and molybdenum. Bloom Special is completely compatible with other applied products and contains no excess salts or chlorine to damage roots or foliage. It is formulated to assure safe, effective simultaneous release of all nutrients in the proper amounts.

PLANT MARVEL BLOSSOM BURST 0 - 50 - 30

Item No.	Description	Size	MSRP
720020	Plant Marvel Blossom Burst	5 lb	$27.99

This highly soluble formulation provides potassium for cell strength and rigidity while providing phosphorus to support plant health and root encouragement. Blossom Burst 0 - 50 - 30 will generally be used at the end of a plants growth cycle and will deliver explosive flowering. In addition, Blossom Burst adds trace elements for a complete nutrient feed. It is quickly absorbed by plant tissue, adding strength to the plant while building its defense against disease and temperature tolerance.

BOTANICARE
PLANT ENERGY PRODUCTS

BLAST OFF™ PLANT GROWTH STIMULANT 0 - 0.1 - 0.1

Item No.	Description	Size	MSRP
732085	Blast Off™	Quart	$18.95
732090	Blast Off™	Gallon	$47.50

Blast Off™ contains high potency natural vitamins and hormones that act as cofactors or substrates for specific plant enzymes. In the presence of these vitamins and hormones the enzymes are activated to carry out crucial biochemical reactions which result in accelerated plant growth. Thus, addition of Blast Off™, with your favorite nutrient, will dramatically improve plant growth. And, if you are growing flowers, fruits, or vegetables, you will be thrilled at the harvest time as your plants reward you with fabulous yields.

PURE BLEND™ PRO BLOOM 2.5 - 2 - 5 & GROW 3 - 1.5 - 4

Item No.	Description	Size	MSRP
718450	Pure Blend™ Pro Bloom	Quart	$18.95
718455	Pure Blend™ Pro Bloom	Gallon	$47.50
718460	Pure Blend™ Pro Bloom	2.5 Gallon	$105.95
718465	Pure Blend™ Pro Bloom	5 Gallon	$200.00
718475	Pure Blend™ Pro Grow	Quart	$18.95
718480	Pure Blend™ Pro Grow	Gallon	$47.50
718485	Pure Blend™ Pro Grow	2.5 Gallon	$105.95
718490	Pure Blend™ Pro Grow	5 Gallon	$200.00

PURE BLEND™ PRO is a hydro-organic vegetative and fruit and flower formula which is a specialty custom blend of organic and natural sources of the essential major, secondary, and trace minerals in 100% soluble form from the land and sea. PURE BLEND™ Pro produces vigorous lush green vegetation and superior fruits, flowers, and vegetables. PURE BLEND™ Pro will provide increased nutritional values and is a healthy, environmentally friendly alternative.

- Essential elements are not derived from harmful chemicals such as a urea and high concentrates of ammonia nitrate.
- Eliminates the danger of exposing plants to toxic heavy metals such as arsenic, mercury, selenium, etc. like in conventional chemical fertilizers.
- The organic components of PURE BLEND™ Pro enhance uptake and utilization of plant nutrients.
- Plants acquire increased pathogen resistance and hardiness.

PURE BLEND™ PRO SOIL FORMULA 1.5 - 4 - 5

Item No.	Description	Size	MSRP
718375	Pure Blend™ Pro Soil	Quart	$18.95
718380	Pure Blend™ Pro Soil	Gallon	$47.50
718385	Pure Blend™ Pro Soil	2.5 Gallon	$105.95
718390	Pure Blend™ Pro Soil	5 Gallon	$200.00

Designed specifically to be used in soil container gardens. Plants grown in soil need higher phosphorous levels due to clay colloidal particles that bind up phosphorous. Microbes in the soil also compete for the phosphorous. When cultivating fruiting and flowering plants in soil, growers usually need to double or triple phosphorous levels, unlike hydroponics, thus making the 1.5-4-5 formula ideal for soil applications.

SWEET™ - CARBO RAW

Item No.	Description	Size	MSRP
732297	Sweet™ - Carbo Raw	Quart	$25.50
732298	Sweet™ - Carbo Raw	Gallon	$64.95
732299	Sweet™ - Carbo Raw	2.5 Gallon	$145.00
732302	Sweet™ - Carbo Raw	5 Gallon	$270.00

NEW!

April 2010

Sweet™ Raw is a flavorless all natural mineral supplement. It is the latest addition to the very popular Sweet product line. It meets the metabolic demands of your plants throughout their life cycle by providing vital compounds when the plants need them most. All Sweet flavors are scientifically formulated with carbohydrates, organic acids, vitamins, and amino acids. This ensures healthy leaf growth in the vegetative stage and a stress-free transition to the fruiting/flowering stage with hearty, fruitful crops. Sweet helps plants maintain an optimum metabolism and a proper balance between photosynthesis and respiration.

Benefits of using Sweet:

- STURDY STEMS AND HEALTHY LEAVES.
- SEAMLESS TRANSITIONS BETWEEN GROWTH PHASES.
- MAINTAINS BALANCED METABOLISM.
- HELPS BALANCE RESPIRATION AND PHOTOSYNTHESIS.
- HARDY PLANTS WITH SHORTER INTERNODES.

SWEET™ - ORIGINAL BERRY

Item No.	Description	Size	MSRP
732291	Sweet™ - Berry	Quart	$25.50
732292	Sweet™ - Berry	Gallon	$64.95
732293	Sweet™ - Berry	2.5 Gallon	$145.00
732294	Sweet™ - Berry	5 Gallon	$270.00

Sweet™ carbohydrate synthesizer contains organic acids, vitamins, amino acids, esters, essential secondary and trace elements which are utilized for the bio-synthesis of crucial compounds to maintain optimal metabolism.

SWEET™ - CITRUS

Item No.	Description	Size	MSRP
732266	Sweet™ - Citrus	Quart	$25.50
732267	Sweet™ - Citrus	Gallon	$64.95
732268	Sweet™ - Citrus	2.5 Gallon	$145.00
732269	Sweet™ - Citrus	5 Gallon	$270.00

Sweet™ Citrus is scientifically formulated for the bio-synthesis of crucial compounds to maintain optimal metabolism and contains: Select carbohydrates for amplified energy, increased sugar/brix content and plant bio-mass. Esters and bio-polyphenolic compounds for increased flavors, aromas, and fatty oil synthesis. Crucial secondary trace elements for enhancing photosynthesis and respiration.

SWEET™ - GRAPE

Item No.	Description	Size	MSRP
732384	Sweet™ - Grape	Quart	$25.50
732386	Sweet™ - Grape	Gallon	$64.95
732388	Sweet™ - Grape	2.5 Gallon	$145.00
732390	Sweet™ - Grape	5 Gallon	$270.00

Sweet Grape, equals its predecessor's performance by supplying plants with the vital energy they need during their entire growth cycle. Sweet Grape contains select carbohydrates, organic acids, vitamins, amino acids, esters, and essential secondary and trace elements which are utilized for the biosynthesis of crucial compounds to maintain optimum metabolism and enhance plants natural production.

LIQUID KARMA™ 0.1 - 0.1 - 0.5

Item No.	Description	Size	MSRP
732275	Liquid Karma™	Quart	$27.50
732280	Liquid Karma™	Gallon	$68.50
732285	Liquid Karma™	2.5 Gallon	$154.00
732290	Liquid Karma™	5 Gallon	$290.00

Liquid Karma™ represents a significant breakthrough in plant nutrition. It contains a full complement of metabolically active organic compounds not found in regular plant foods or supplements. These compounds are absorbed immediately and act as regulatory signals, activators or catalysts to produce synchronized and accelerated growth under all conditions. Liquid Karma™ functions as a growth engine because its high metabolic activity produces a large amount of energy, which is immediately transformed to growth. It contains fermented compost, amino acids, vitamins, plant extracts, humic acid, seaweed extract and carbohydrates.

ZHO - ROOT INOCULANT

NEW! April 2010

Item No.	Description	Size	MSRP
732316	ZHO Root Inoculant	.25 lb	$29.95
732318	ZHO Root Inoculant	1 lb	$99.95

Zho is a unique and proprietary blend of fungi that builds a natural microbial system in and around plant roots which greatly improves plant and root growth, vigor, and production naturally.

Beneficial fungi like mycorrhizae and trichoderma colonize on and around plants roots forming a symbiotic relationship with the plants and help increase the root mass by up to 1000 times thereby allowing more efficient nutrient and water uptake by the plants. These fungi also benefit plants by releasing natural chemicals that help dissolve elements like phosphorus and iron that are less available to plants in their natural state. Soil structure can also improve due to the increased rhizobial activity.

L-glycine provides an added benefit to Zho by adding an energy source and source of direct nutrient uptake by the Zho microbial community.

POWER PLANT™ 3 - 1 - 4 & POWER FLOWER™ 2 - 2 - 5

Item No.	Description	Size	MSRP
718350	Power Plant™	Quart	$17.95
718355	Power Plant™	Gallon	$44.95
718325	Power Flower™	Quart	$18.95
718330	Power Flower™	Gallon	$47.50
718335	Power Flower™	2.5 Gallon	$105.00

Power Plant™ contains all 16 elements known to be essential for plants, not just nitrogen, phosphorous, and potassium found in most other liquid plant foods. The elements are carefully combined in delicately balanced proportions to produce optimal plant growth.

Power Flower™ is specially formulated to maximize floral induction and development in flowering plants. Like Power Plant™, Power Flower™ contains a full complement of essential elements. However, it is fortified with extra phosphate, potassium, sulfur, selected trace elements, and plant vitamins to unleash the total flowering potential of flower-bearing plants.

HYDROPLEX™ BLOOM MAXIMIZER 0 - 10 - 6

NEW!

Item No.	Description	Size	MSRP
733090	Hydroplex™ Bloom	8 oz	$10.95
733092	Hydroplex™ Bloom	Quart	$29.95
733094	Hydroplex™ Bloom	Gallon	$79.95
733096	Hydroplex™ Bloom	2.5 Gallon	$179.95
733098	Hydroplex™ Bloom	5 Gallon	$339.95

Originally available in two formulas, Hydroplex has been condensed down to one balanced formula that is effective for all growing mediums. Hydroplex Bloom Maximizer, now includes a broader range of amino acids, more trace minerals, and more select, beneficial vitamins. Use Hydroplex in conjunction with any base bloom nutrient to maximize the yield potential of fruiting and flowering plants. Though most standard PK boosters are structured to create larger fruits and flowers, Hydroplex Bloom Maximizer surpasses that standard by both increasing plants resistance to external stresses and amplifying natural enzyme, chlorophyll, and essential oil production.

SILICA BLAST™

Item No.	Description	Size	MSRP
732485	Silica Blast™	Quart	$14.50
732490	Silica Blast™	Gallon	$36.50

Silicate is a beneficial nutrient supplement to be used in conjunction with a standard nutrient program. Silicate helps strengthen plant tissue helping plants flourish in adverse environmental conditions such as heat, drought, and frost. For use in container gardens or soilless hydrogardening applications.

CLEAREX™ SALT LEACHING SOLUTION

Item No.	Description	Size	MSRP
732605	Clearex™	Quart	$14.50
732610	Clearex™	Gallon	$32.50
732615	Clearex™	2.5 Gallon	$72.50
732620	Clearex™ (SO)	5 Gallon	$134.95

Clearex™ is an isotonic drenching solution that unlocks the ionic bond between the nutrient and the soil or soilless grow substrate, correcting the problem of nutrient salt toxicity and lockout, allowing plants to thrive again.

BOTANICARE® 8 OZ. KITS - GROPAKS™

720700 720705

Item No.	Description	Size	MSRP
720700	Pure Blend™ Hydro Kit	8 oz.	$16.95
720705	Pure Blend™ Soil Kit	8 oz.	$16.95
720710	Supplement Kit	8 oz.	$17.50

Kit includes one 8 oz. bottle of:
- Pure Blend™ Pro Grow
- Liquid Karma™
- Pure Blend™ Pro Bloom

Kit includes one 8 oz. bottle of:
- Pure Blend™ Pro Grow
- Liquid Karma™
- Pure Blend™ Pro Soil

Kit includes one 8 oz. bottle of:
- Cal-Mag Plus™
- Sweet™
- Clearex™

TRIFLEX™ GROW FORMULA 2 - 1 - 4 & BLOOM FORMULA 1 - 4 - 2

Item No.	Description	Size	MSRP
718425	Triflex™ Grow	Quart	$14.95
718430	Triflex™ Grow	Gallon	$34.95
718410	Triflex™ Bloom	Quart	$15.95
718415	Triflex™ Bloom	Gallon	$38.95

Grow Formula contains 2% Nitrogen, 1% Phosphorous expressed as P2O5, and 4% soluble Potash expressed as K2O. The formula also contains 1% elemental Magnesium. Fortified with selected vitamins, botanical tissue culture ingredients, essential amino acids, seaweed, humic acid, fulvic acid, and carbohydrates.

This component of TRIFLEX ™ contains 1% Nitrogen, 4% Phosphorous, and 2% Potash. The formula also contains 1.5% Magnesium and 1% Sulfur. Fortified with selected vitamins, botanical tissue culture ingredients, essential amino acids, seaweed, humic acid, fulvic acid, and carbohydrates.

TRIFLEX™ BASE FORMULA 2 - 0 - 3

Item No.	Description	Size	MSRP
718395	Triflex™ Base	Quart	$16.95
718400	Triflex™ Base	Gallon	$47.95

In addition to containing 2% Nitrogen and 0% Phosphorous, 3% Potash, the Base Formula also contains 4.5% Calcium as well as the essential trace elements including: Boron, Iron, Manganese, Cobalt, Zinc, Iodine, Copper, and Molybdenum. In order to make Base Formula more effective, it is fortified with selected vitamins, botanical tissue culture ingredients, essential amino acids, seaweed, humic acid, fulvic acid, and carbohydrates.

PURE BLEND™ ORIGINAL BLOOM 0.5 - 0.5 - 1 & GROW 1 - 0.5 - 1

Item No.	Description	Size	MSRP
732335	Pure Blend™ Original Bloom	Quart	$12.50
732340	Pure Blend™ Original Bloom	Gallon	$32.50
732345	Pure Blend™ Original Bloom	2.5 Gal	$72.50
732355	Pure Blend™ Original Grow	Quart	$12.95
732360	Pure Blend™ Original Grow	Gallon	$32.50
732365	Pure Blend™ Original Grow	2.5 Gal	$72.50

ORGANIC

PURE BLEND™ ORIGINAL ORGANIC FORMULA is a hydro-organic compost solution blended with select organic ingredients from the land and sea. PURE BLEND™ contains all major elements as well as natural humates. A few of the benefits of using PURE BLEND ™ include:

- Lush green, healthy vegetation.
- Larger fruits, vegetables and flowers with higher yields.
- More compact plants with shorter internodes.
- Increased growth and crop maturity rates.
- High mineral, vitamin, sugar and oil contents in produce.

PURE BLEND ™ reduces plant stress caused by severe environmental conditions, such as heat, frost and drought and rebuilds overworked "dead" soil and brings it "alive" again. Allows beneficial microbes to live and thrive within the growing substrate or soil, converting organic elements into usable plant energy and thus producing increased plant bio-mass. PURE BLEND ™ is best used as a supplement to standard fertilizer or hydroponic nutrient formulations.

CNS17™ HYDROPONIC GROW 3 - 2 - 4 & BLOOM 2 - 2 - 5

Item No.	Description	Size	MSRP
733030	CNS17™ Hydroponic Grow	Gallon	$26.95
733035	CNS17™ Hydroponic Grow	2.5 Gal	$65.00
733040	CNS17™ Hydroponic Grow	5 Gal	$115.00
733045	CNS17™ Hydroponic Bloom	Gallon	$26.95
733050	CNS17™ Hydroponic Bloom	2.5 Gal	$65.00
733055	CNS17™ Hydroponic Bloom	5 Gal	$115.00

CNS17™ Hydroponic Formulas are an element rich plant food which is ideally suited to a wide range of vegetable, flower, and fruiting crops grown in hydroponics or soil. They combine high levels of calcium with sulfates and phosphates producing a mixture that provides a guaranteed complete spectrum of plant nutrients. Additionally due to the molecular composition of CNS17™ in dilution with water, the organic structures hydrolyze to provide an energy source for beneficial microbes in solution. CNS17™ contains chelates which protect ions such as iron, manganese, and zinc which can improve plant availability under a range of conditions. These are highly concentrated, economical fertilizers that produces premium results.

CNS17™ RIPE 1 - 5 - 4

Item No.	Description	Size	MSRP
733020	CNS17™ Ripe	Quart	$9.95
733023	CNS17™ Ripe	Gallon	$26.95
733025	CNS17™ Ripe	2.5 Gal	$65.00
733027	CNS17™ Ripe	5 Gal	$115.00

CNS17 Ripe 1-5-4 is a specially designed formula requested by industry professionals to be used in the final 3-4 weeks of the bloom cycle. Ripe has an adjusted NPK of 1-5-4 intended to help promote ripening in fruiting and flowering plants. By reducing nitrogen amounts to a minimum level and maintaining optimal ranges of phosphorous and potassium, the use of Ripe will encourage plants to focus more energy on reproductive functions while still maintaining adequate nutrition levels for foliage. Compatible in both soil and soilless gardens, Ripe is a great addition to users already using the CNS 17 Family line.

CNS17™ COCO GROW 5 - .5 - 2 & BLOOM 2 - 1 - 3

Item No.	Description	Size	MSRP
733052	CNS17™ Coco Grow	Quart	$10.50
733054	CNS17™ Coco Grow	Gallon	$26.95
733056	CNS17™ Coco Grow	2.5 Gal	$65.00
733058	CNS17™ Coco Grow	5 Gal	$115.00
733060	CNS17™ Coco Bloom	Quart	$10.50
733062	CNS17™ Coco Bloom	Gallon	$26.95
733064	CNS17™ Coco Bloom	2.5 Gal	$65.00
733066	CNS17™ Coco Bloom	5 Gal	$115.00

CNS17™ Coco and Soil Formula has been formulated for use mainly with coir fiber as the growing substrate, but is suitable for use in most substrates. CNS17 Coco and Soil is designed with high calcium levels and provides a full spectrum of elements for a wide range of vegetables and flowing plants. It is considered a professional strength, stand alone nutrient that can be used in conjunction with supplements if desired. The chelates contained in CNS17 Coco and Soil aid in the absorption of trace elements such as iron, manganese, and zinc. Balanced with proper nutrient ions for plant metabolism CNS17 Coco and Soil does what virtually no other single part nutrient can, provides a broad spectrum of elements for your plants.

AQUASHIELD™ COMPOST SOLUTION

Item No.	Description	Size	MSRP
704280	AquaShield™	4 oz.	$4.95
704283	AquaShield™	8 oz.	$6.95
704285	AquaShield™	Quart	$13.95
704287	AquaShield™	Gallon	$35.00
704290	AquaShield™	2.5 Gal	$78.00
704295	AquaShield™	5 Gal	$148.00

AquaShield™ is useful throughout a plants life cycle in both soil gardens and hydrogardens utilizing aeroponics, deep water culture, ebb and flow, and top water drip to create a natural and beneficial growing environment. AquaShield™ will assist in strengthening your clones root masses and offers the best chance of survival when transplanting. It also benefits mature plants in providing a healthy root zone for optimum plant performance.

CAL-MAG PLUS™ 2 - 0 - 0

Item No.	Description	Size	MSRP
732110	Cal-Mag Plus™	Quart	$17.95
732115	Cal-Mag Plus™	Gallon	$44.95
732120	Cal-Mag Plus™	2.5 Gallon	$105.00
732125	Cal-Mag Plus™	5 Gallon	$200.00

Cal-Mag Plus™ is a bio-catalyst for plants. A beneficial plant nutrient correcting the inherent problem of calcium, magnesium and iron mineral deficiencies found in most soil fertilizers and some hydroponic nutrient liquid concentrated formulas.

GUARDIAN MY™ LIQUID & POWDER

Liquid

Powder

Item No.	Description	Size	MSRP
733068	Guardian MY™ Liquid	8 oz.	$11.95
733070	Guardian MY™ Liquid	Quart	$39.95
733072	Guardian MY™ Liquid	Gallon	$124.95
733074	Guardian MY™ Powder	1/4 lb	$19.95
733076	Guardian MY™ Powder	1 lb	$59.95

Guardian MY™ is a unique, proprietary blend of Endo-Mychorrhizal fungi, that builds a natural microbial system in and around plant roots which greatly improves plant growth, vigor and production naturally. Mycorrhizae are beneficial soil fungi that colonize in and around the roots of plants. These colonies form a symbiotic relationship with the plants and increase the root mass by up to 1000 times, therefore, allowing the plant to uptake nutrients and water more efficiently. Mycorrihzae also benefits plants by releasing chemicals that aid in dissolving elements like iron that are harder for plants to absorb. Other benefits of mycorrhizal inoculation include improved soil structure due to the increased rhizobial activity, and increased disease and pathogen resistance which can be associated with the excretion of special antibiotics produced by Mycorrhizae.

HUMEGA NATURAL & ORGANIC SOIL CONDITIONER

ORGANIC

OMRI™ Listed

Item No.	Description	Size	MSRP
739002	Humega Soil Cond	Quart	$11.95
739004	Humega Soil Cond	Gallon	$30.00
739006	Humega Soil Cond (SO)	2.5 Gal	$70.00
739008	Humega Soil Cond (SO)	5 Gal	$125.00

For use in soil container gardens and hydroponic systems. Beneficial for fruits, flowers, vegetables, trees and shrubs. Humega is a liquid humus - a combination of natural, organic plant acids, including humic acid, in enzymatic microbial solutions. It is a biologically enhanced formula increases the availability of micronutrients and buffer salts. Grow media that has been inoculated with Humega contains a large population of beneficial microorganisms which protect plant root systems from a variety of soil pathogens. The microorganisms process and release organic matter, and release nutrients to plant roots.

HUVEGA NATURAL MAGNESIUM SUPPLEMENT

ORGANIC

OMRI™ Listed

Item No.	Description	Size	MSRP
739012	Huvega Mag Supp	Quart	$17.95
739014	Huvega Mag Supp	Gallon	$45.00
739016	Huvega Mag Supp (SO)	2.5 Gal	$100.00
739018	Huvega Mag Supp (SO)	5 Gal	$190.00

Huvega is a natural magnesium supplement, beneficial for fruits, flowers, vegetables, trees and shrubs. How it works:

- Releases minerals in soil.
- Protects plants from stresses.
- Stimulates antibiotic protection.
- Reduces wilting.
- Increases DNA metabolism.
- Promotes high yield crops.

CALPLEX™

ORGANIC

OMRI™ Listed

Item No.	Description	Size	MSRP
739022	Calplex™	Quart	$13.95
739024	Calplex™	Gallon	$34.95

Calplex is a natural calcium supplement in a soluble liquid, formulated to correct calcium deficiencies in all types of plants. It is readily assimilated into the root, stem, and leaf cells of plants. Calcium plays an essential role in plant development and overall plant health. Key functions of calcium include: cell production and growth as well as aiding fruit sets. Mild calcium deficiencies can appear as dark green foliage and very stunted growth normally occurring in new growth first. Severe deficiencies can turn new growth into shriveled, off colored, dead leaves before they have a chance to develop. Since most plants can absorb calcium at very high rates, you may need to replenish their supply from time to time with a calcium supplement like Calplex. For use in container gardens and hydroponic systems.

NITREX™ 6 - 0 - 0

ORGANIC

OMRI™ Listed

Item No.	Description	Size	MSRP
739032	Nitrex™	Quart	$13.95
739034	Nitrex™	Gallon	$34.95

Nitrex is an organic-based, biologically enhanced, highly soluble source of mineral nitrogen. Nitrogen is one of the most critical nutrients required for healthy plants. It is mainly responsible for leaf and stem growth and is also essential to the production of enzymes, chlorophyll, and amino acids. Early nitrogen deficiencies can appear as stunted growth, yellowing in the leave between the veins, purplish-red stems and pronounced veins. In later stages, nitrogen deficient plants may display entirely yellow leaves with a large amount of leaf drop. Nitrex can be used to replenish nitrogen used or lost from frequent watering. Beneficial for fruits, flowers, vegetables, trees and shrubs.

SEAPLEX™

Item No.	Description	Size	MSRP
739042	SeaPlex™	Quart	$19.95
739044	SeaPlex™	Gallon	$49.95

OMRI™ Listed

ORGANIC

Seaplex is a cold processed seaweed for foliar spraying, soil and soilless container gardens and hydroponic systems. Seaplex contains only the most effective ascophyllum nodosom, a brown kelp that is harvested from the cold, clean waters of the north Atlantic. Brown Kelp's slow growth cycle packs it with maximum levels of amino acids, enzymes, micronutrients, plant hormones (auxins, cytokins, gibberllins) and soil biology that encourages vigorous and healthy plant growth. Beneficial for fruits, flowers, vegetables, trees and shrubs. Seaplex's natural, potent mixture is enriched with a proprietary enzyme structure, along with a wide range of ionic minerals.

PURE™ 6 - 6 - 5 + 8% Ca

Item No.	Description	Size	MSRP
739050	Pure™	2 lb Bag	$5.95
739051	Pure™	5 lb Tub	$15.95
739052	Pure™	12 lb Bag	$34.95
739054	Pure™ (Special Order)	50 lb Bag	$59.95

ORGANIC

Pure natural and organic plant food is the base for the Organicare Plant Nutrient System. Pure contains only natural, organic-based ingredients. It is ideal for container gardens, raised bed gardens, potted plants and hydroponics. Beneficial for fruits, vegetables, trees, shrubs and turf. Pure's carbon based, biologically enhanced granules feed beneficial soil microorganisms, which in turn, feed your plants. The end result is Naturally Superior™, rapid, and vigorous growth. Pure contains a combination of highly active organic acids including humic acid. We combine major growth promoters like fish meal and seaweed with composted poultry litter, alfalfa meal, sulfate potash, macro and micro minerals, amino acids, proteins, and natural plant extracts to create a highly effective fertilizer and growth stimulator.

PURE™ BLOOM GRANULAR 1 - 5 - 4

Item No.	Description	Size	MSRP
739062	Pure™ Bloom Granular (SO)	1/4 lb	$2.00
739064	Pure™ Bloom Granular	1 L	$5.95
739066	Pure™ Bloom Granular	5 lb	$15.95
739068	Pure™ Bloom Granular	12 lb	$34.95
739070	Pure™ Bloom Granular (SO)	50 lb	$60.00

ORGANIC

Primarily formulated for soil gardeners, Pure Bloom's slow release all organic granules will satisfy your fruiting and flowering plants nutritional needs during the bloom phase of their grow cycle while providing critical soil micro-organisms with the food supply they need to flourish.

FOXFARM SOIL & FERTILIZER COMPANY

BIG BLOOM™ 0.01 - 0.3 - 0.7

Item No.	Description	Size	MSRP
718520	Big Bloom™	Quart	$15.39
718525	Big Bloom™	Gallon	$48.29
718530	Big Bloom™	2.5 Gallon	$103.69
718535	Big Bloom™	5 Gallon	$202.19

ORGANIC

This microbial active, water soluble instant plant food specifically formulated to promote and emphasize the blooming characteristics of all flowering and fruiting plants. Big Bloom™ promotes extra large, multiple blooms while dramatically enhancing the flavor of fruits and vegetables. High PK content sweetens taste, fragrance and oil production. It is suitable for hydroponics, soil, and drip irrigation systems. Can be used for the whole cycle of plant and in conjunction with other FoxFarm nutrients.

GROW BIG® 6 - 4 - 4

Item No.	Description	Size	MSRP
718500	Grow Big®	Quart	$20.59
718505	Grow Big®	Gallon	$62.95
718510	Grow Big®	2.5 Gallon	$146.29
718515	Grow Big®	5 Gallon	$253.95

Grow Big® is a stable, highly concentrated, comprehensive blend of major, minor and micro nutrients formulated to promote spectacular balanced growth, instant green-up and color intensity of blossoms. Grow Big® will enhance plant size and structure of all plants. Grow Big® is great for roses, tomatoes and lawns. Perfect for use during the vegetative cycle, or Grow Big® can be used as the only houseplant fertilizer you will ever need. Expect exceptional results.

GROW BIG® HYDROPONIC 3 - 2 - 6

Item No.	Description	Size	MSRP
718540	Grow Big® Hydroponic	Quart	$20.59
718545	Grow Big® Hydroponic	Gallon	$62.95
718550	Grow Big® Hydroponic	2.5 Gallon	$146.29

Delivers a full spectrum of micro-nutrients and allows for pH adjustment without nutrient lockup. Emphasizes the maximum genetic growth, flowering, and fruiting characteristics of each plant. Sets the standard for quality results!

TIGER BLOOM® 2 - 8 - 4

Item No.	Description	Size	MSRP
718560	Tiger Bloom®	Quart	$20.59
718565	Tiger Bloom®	Gallon	$62.95
718570	Tiger Bloom®	2.5 Gallon	$146.29
718575	Tiger Bloom®	5 Gallon	$253.95

Tiger Bloom® is a low salt, 80% organic fertilizer with chelated minerals. To facilitate easy and immediate absorption this formula is biologically active. It creates a huge flower canopy, massive bud set, prolongs the flowering stage. Tiger Bloom® contains just the right amount of Nitrogen to ensure sturdy lush greenery, growth and vigor as well as producing intense color and blossoming, and dark, dense cell tissue. Perfect to use on any plant at the time of flowering.

AMERICAN PRIDE® 9 - 6 - 6 & MARINE CUISINE® 10 - 7 - 7

Item No.	Description	Size	MSRP
718578	American Pride®	4 lb Bag	$14.59
718583	Marine Cuisine®	4 lb Bag	$14.59

American Pride® is considered to be the best all-purpose fertilizer of its kind. It is especially effective for roses, formulated specifically with the nutrients on which roses thrive; alfalfa, iron, and linoleic acid. The additional Iron & Copper produces rich, dark green foliage and abundant blooms. When decomposing, American Pride® will develop more nitrate nitrogen, which is more suitable for flowers than vegetables. Use only three times per year, at the beginning of spring, late spring, and late summer. Features a resealable bag.

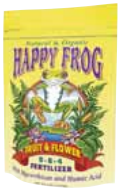
Marine Cuisine® is a powerful blend of balanced plant foods combined with Pacific Northwest sea-going fish, crab meal, shrimp meal, bat guano, and earthworm castings, natures finest soil amendment. Crab and oyster shells feed the beneficial microbes in the soil, creating a healthy soil ecosystem. While decomposing, these oyster and crab shells create ammonical nitrogen which repels harmful adult nematodes out of the growing area. Ammonical nitrogen also benefits vegetables and heavy nitrogen feeders. It offers long term feeding, though a slightly later release than American Pride® due to the slower decomposition of the ocean by-products. Perfect for evergreens, azaleas, camellias, rhododendrons, dogwoods, and mix in with vegetables at time of planting for a better crop. Use only twice a year, in early spring and again in late summer. Features a resealable bag.

HAPPY FROG® FERTILIZERS

Item No.	Description	Size	MSRP
720179	Happy Frog High Phosphorus Bat Guano 0 - 5 - 0	4 lb Bag	$15.29
720161	Happy Frog Fruit & Flower 5 - 8 - 4	4 lb Bag	$10.59
720163	Happy Frog Japanese Maple 4 - 8 - 5	4 lb Bag	$10.59
720165	Happy Frog Tomato & Vegetable 7 - 4 - 5	4 lb Bag	$10.59
720167	Happy Frog Acid Loving 6 - 4 - 4	4 lb Bag	$10.59
720169	Happy Frog All Purpose 5 - 5 - 5	4 lb Bag	$10.59
720171	Happy Frog Steamed Bone Meal 3 - 15 - 0	4 lb Bag	$10.59
720173	Happy Frog Bulb Food 3 - 8 - 8	4 lb Bag	$10.59
720175	Happy Frog Jump Start 3 - 4 - 3	4 lb Bag	$10.59
720177	Happy Frog Premium Lawn 8 - 2 - 6	4 lb Bag	$10.59
720181	Happy Frog Rose Food 4 - 4 - 5	4 lb Bag	$10.59

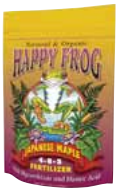
ORGANIC

Our high phosphorus bat guano is perfect for gardeners who want the extra strength of this single, powerful ingredient. Because of the long aging process that this product goes through, our bat guano is packed with phosphorus to deliver spectacular flowers, sweeter fruit, and multiple bud set. Packed in a resealable plastic bag.



ORGANIC

Fruit & Flower delivers multiple blooms and great bud set for all your flowering plants. You'll get brighter colors, spellbinding scents, and delicious flavors, all thanks to the extra boost that comes from the micronutrients and living organisms in our fertilizers. You might not see the healthy root system below ground, but the multiple branching and heavy bud set above ground will tell you that your plants are well-fed. Packed in a resealable plastic bag.



ORGANIC

Japanese Maple Fertilizer uses a lower-nitrogen formula that supports a natural tendency to grow in cool weather environments. This means less leaf scorch in summer—even in sun—and a smooth transition to dazzling fall color. A lower pH helps the roots take up the nutrients they need, and phosphorus and potassium deliver color illumination like you've never seen before. You'll get all the brilliant reds, purples, and oranges that make Japanese maples the crowning glory of the garden. Packed in a resealable plastic bag.

ORGANIC

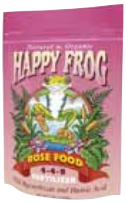
Rhododendrons, Azaleas, Hydrangeas, and other acid-loving plants have special nutritional needs. Without the right pH balance, the roots simply cannot access the nutrients in the soil. Acid Loving Plant formula has a special pH level just for acid-loving plants, and it's blended with premium organic ingredients. Packed in a resealable plastic bag.

ORGANIC

Steamed bone meal is the secret ingredient of flower gardeners. For healthy plant growth and spectacular flowers, supplement your regular feeding program with our bone meal. It contains calcium, which creates strong cellular development in plants. Packed in a resealable plastic bag.

ORGANIC

Get young transplants and seeds off to the right start. From their first day in your garden, they need the right mix of nutrients to germinate and grow. This gentle blend includes phosphorus for healthy root development, and calcium, which helps buffer acidic soils and increases a plant's ability to fight off disease. Our Jump Start formula is pH-balanced with premium organic ingredients. Packed in a resealable plastic bag.



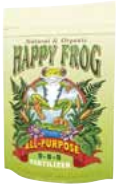
ORGANIC

Rose gardeners know that their prize-winning blooms deserve more than an all-purpose fertilizer. Our Rose Food includes linoleic acid, a compound found in alfalfa meal, which acts as a growth stimulant and helps produce higher yields.

Our Rose Food formula is pH-balanced with premium organic ingredients like alfalfa meal, bat guano, kelp meal, feather meal and humic acid, a naturally occurring organic material that is formed when organic matter decomposes. Humic acid helps with seed germination and may increase the uptake of important micronutrients. Packed in a resealable plastic bag.

ORGANIC

Before you can bring a great meal to your table, you need to bring a great meal to your garden. Tomatoes, soft fruits, and veggies require a special nutritional mix to ensure high yields. Our Tomato & Vegetable formula is pH-balanced with premium organic ingredients. Humic acid helps with seed germination and may increase the uptake of important micronutrients. Packed in a resealable plastic bag.



ORGANIC

Support healthy growth all season long with our Happy Frog® All-Purpose blend. It's pH-balanced with premium organic ingredients. Packed in a resealable plastic bag.

ORGANIC

Planting bulbs in the fall is an investment in the future. You know your hard work will be rewarded in spring, when Tulips, Daffodils, and Hyacinths burst into bloom. Protect that investment with our specially formulated Bulb Food. It's designed to support gorgeous flowers and a long blooming season. Our Bulb Food is pH-balanced with premium organic ingredients. Packed in a resealable plastic bag.

ORGANIC

You love your lawn. It's where your children play and your pets roam. So keep it green and lush without the use of harsh chemicals. Our Premium Lawn formula is pH balanced, and it's blended with premium organic ingredients like bat guano, kelp meal, bone meal, feather meal and humic acid, a naturally occurring organic material that is formed when organic matter decomposes. Humic acid helps with seed germination and may increase the uptake of important micronutrients. Packed in a resealable plastic bag.

OPEN SESAME® 5 - 45 - 19

Item No.	Description	Size	MSRP
719920	Open Sesame®	1 lb	$35.95
719925	Open Sesame®	2 lb	$62.17

Open Sesame® is a high-phosphorus soluble early-flowering formula fertilizer that is designed to bring plants into bloom at your command. Feed with Open Sesame® starting at about the fifth or sixth week of a plant's life. It will go right to work at the root zone and delivered targeted nutrients when the plants need them the most. Open Sesame® will only take a couple of weeks to produce stocky, sturdy, compact, high-producing plants and buds that are ready to burst. Designed to work with FoxFarms other plant foods and fertilizers.

BEASTIE BLOOMZ® 0 - 50 - 30

Item No.	Description	Size	MSRP
732759	Beastie Bloomz®	1 lb	$35.95
732760	Beastie Bloomz®	2 lb	$62.19

Beastie Bloomz® is perfect for gardeners and growers who are ready to take their plants to the next level. This is a high-phosphorus soluble fertilizer that's geared towards building amazing buds and flowers. Our revolutionary micronutrient pack is designed to create unbelievable internal bud density, which means that plants create fat, dense, tightly-packed blossoms, and plenty of them. You'll also see exceptionally brilliant color and a long, dazzling blooming season. Designed to work with FoxFarms other plant foods and fertilizers.

CHA CHING® 9 - 50 - 10

Item No.	Description	Size	MSRP
732749	Cha Ching®	1 lb	$35.95
732750	Cha Ching®	2 lb	$62.19

Cha Ching® is engineered to maximize the final phase of a plant's production. Made to use after the fruit has set, Cha Ching® is packed with just the right combination of nutrients to make fruit and flowers drip with flavor and ooze with fragrance. Cha Ching® is a high-phosphorous fertilizer that won't leave a salty residue or buildup in your hydroponic systems or containerized soil plantings. It contains all the essential elements like calcium, magnesium, boron, manganese, sulfur, molybdenum, iron, copper and zinc to support solid fruit on compact, stocky plants. Designed to work with FoxFarms other plant foods and fertilizers.

FOXFARM SOLUBLE TRI PACK

Item No.	Description	Size	MSRP
719930	Soluble Tri Pack	3/1 lb	$106.95

FoxFarm family of fertilizers perform the best when used together. Achieve bumper crop harvests in your garden by combining Beastie Bloomz®, Cha Ching® and Open Sesame®, FoxFarm's line of high-octane soluble fertilizers. They are specially designed to compliment one another, and deliver generous helpings of all major, minor and micro-nutrients that plants thrive on. Feed your plants the exact nutrition they need for the specific cycle of life they are in. If stocky, compact, flower packed plants are your thing, try FoxFarm Soluble Tri Pack.

When you buy FoxFarm Soluble Tri Pack, a portion of the proceeds go towards Hydro for Hunger, an organization dedicated to reducing world hunger through the power of hydroponic gardening.

HYDRODYNAMICS INTERNATIONAL INC

IONIC® BLOOM 3 - 2 - 6 & IONIC® BLOOM HARDWATER FORMULA 3 - 2 - 6

Item No.	Description	Size	MSRP
718175	Ionic® Bloom	Quart	$15.50
718180	Ionic® Bloom	Gallon	$38.00
718185	Ionic® Bloom	2.5 Gal	$70.00
718190	Ionic® Bloom	5 Gal	$140.00
718200	Ionic® Bloom Hardwater	Gallon	$38.00
718205	Ionic® Bloom Hardwater	2.5 Gal	$70.00

Ionic® Bloom is for the reproductive and flowering stage of growing plants. It delivers the essential elements to the roots of a plant in a more precise manner. Ionic® Bloom is enhanced with the crucial elements that support increased budding points and large, fragrant flowers. For best results use with Ionic Boost.

Ionic® Bloom Hardwater is purposely blended to be more acidic than standard Ionic® Bloom. A more acidic nutrient solution will neutralise bicarbonates on its own. This in turn reduces the amount of acid needed to control the pH in the reservoir and thus reduces the possibility of acute phosphate accumulation. It is also formulated to take into account the minerals, such as calcium, that are usually present in hard water.

IONIC® GROW 3 - 1 - 5 & IONIC® GROW HARDWATER FORMULA 3 - 1 - 5

Item No.	Description	Size	MSRP
718225	Ionic® Grow	Quart	$15.50
718230	Ionic® Grow	Gallon	$38.00
718235	Ionic® Grow	2.5 Gal	$70.00
718240	Ionic® Grow	5 Gal	$140.00
718250	Ionic® Grow Hardwater	Gallon	$38.00

Specifically formulated for the green vegetative stage of growing plants, Ionic® Grow delivers the essential elements to the roots of a plant in a more precise manner. It is designed to maximize the potential for vigorous vegetative growth in green plants and during the vegetative cycle of flowering plants.

Ionic® Grow Hardwater is purposely blended to be more acidic than standard Ionic® Grow. A more acidic nutrient solution will neutralise bicarbonates on its own. This in turn reduces the amount of acid needed to control the pH in the reservoir and thus reduces the possibility of acute phosphate accumulation. It is also formulated to take into account the minerals, such as calcium, that are usually present in hard water.

IONIC® BOOST 0 - 5 - 6

Item No.	Description	Size	MSRP
732255	Ionic® Boost	Quart	$15.50
732260	Ionic® Boost	Gallon	$38.00
732265	Ionic® Boost	2.5 Gal	$70.00

Ionic® Boost is formulated to be applied during the final few weeks before harvest of most fruiting and/or flowering crops. Ionic® Boost allows the grower easy control of the extra phosphorus and potassium that can lead to bumper yields. It is designed to work with Ionic® Bloom products, but is also compatible with most liquid nutrients of the bloom variety.

Ionic® Boost delivers the key mineral elements phosphorus (P) and potassium (K) in a pure form that is instantly accessible to the plant. These crucial ingredients are used in abundance by plants in their fruiting or flowering cycle and the extra levels provided by Ionic® Boost can lead to larger flowers and greatly increased fruit and vegetable yields.

GREEN FUSE® STIMULATORS - Pure, organic plant stimulators, GreenFuse® products are manufactured in Holland where they have undergone extensive testing by commercial growers. The results... stronger growth, bigger flowers, improved aroma and flavor. No negative residual effect on plants, people or the environment. GreenFuse® Plant Stimulators are plant nutrient supplements that are blended from 100% pure plant extracts. It is a highly concentrated nutrient additive.

GREEN FUSE® STIMULATORS

Item No.	Description	Size	MSRP
732700	Root Stimulator	12 oz.	$20.00
732705	Root Stimulator	Quart	$40.00
732710	Root Stimulator	Gallon	$140.00
732715	Growth Stimulator	12 oz.	$20.00
732720	Growth Stimulator	Quart	$40.00
732725	Growth Stimulator	Gallon	$140.00
732730	Bloom Stimulator	12 oz.	$20.00
732735	Bloom Stimulator	Quart	$40.00
732740	Bloom Stimulator	Gallon	$140.00

ORGANIC

Based on natural plant extracts that will help to initiate new roots and nourish the young plant as it grows, GreenFuse® Root Stimulator is beneficial at all stages of the propagation process and is beneficial to all young plants.

Based on natural plant extracts that will maximize the potential of the plant to produce strong stems and healthy leaves, GreenFuse® Growth Stimulator is beneficial at all stages of vegetative growth. Mist over foliage for extra vigor.

Based on natural plant extracts that will maximize the potential of the plant to produce heavy buds and flowers, GreenFuse® Bloom Stimulator is beneficial throughout the flowering and fruiting cycle. Mist over foliage (avoiding flowers) for even heavier yields.

MOTHER PLANT® A 2 - 0 - 0 & B 1 - 1 - 3

Item No.	Description	Size	MSRP
732890	MotherPlant® A	Quart	$9.95
732891	MotherPlant® B	Quart	$9.95
732892	MotherPlant® A	Gallon	$24.95
732893	MotherPlant® B	Gallon	$24.95

MotherPlant® is a two-part nutrient formula provides balanced nutrition for stock plants, whether grown hydroponically, in soilless mixes, or soil.

Exacting N-P-K ratios are calibrated to meet the nutritional requirements of the mother plant, without excess nitrates. Rich bio-organics are added to improve the uptake of nutrients and strengthen the plant's natural immunity to environmental stress. MotherPlant® Nutrients will help your mother plants produce the most vigorous clones possible!

NITROZIME™ 0 - 4 - 4

Item No.	Description	Size	MSRP
732295	Nitrozime™	8 oz.	$20.00
732300	Nitrozime™	Pint	$35.00
732305	Nitrozime™	Quart	$65.00
732310	Nitrozime™	Gallon	$199.00

ORGANIC

Nitrozime® Marine Algae Extract is a plant nutrient supplement derived exclusively from Ascophyllum Nodosum Seaweed. Nitrozime® Marine Algae Extract is 100% organic and extremely concentrated, 8 times more so than common seaweed fertilizers, and contains many of the nutrients and growth hormones that all plants require for vigorous, healthy growth. The benefits of seaweed to plant growth are legendary. Nitrozime® enhances a plants natural abilities with lush vegetation, earlier flowering, and increased yields.

EUROPONIC® ROCKWOOL CONDITIONING SOLUTION™

Item No.	Description	Size	MSRP
732455	Europonic® Rockwool Conditioning Solution™	Quart	$15.00
732460	Europonic® Rockwool Conditioning Solution™	Gallon	$35.00

Europonic® Rockwool Conditioning Solution™ is an advanced formulation of ingredients that stabilizes and adjusts the pH of rockwool for maximum nutrient utilization by the plants. A premium blend of pH controls and pure mineral salts, Europonic® Rockwool Conditioning Solution™ is ideal for pre-conditioning rockwool and stonewool growing media products before starting seeds, clones and transplants.

EUROPONIC® FOSSIL FUEL™

Item No.	Description	Size	MSRP
732220	Fossil Fuel™	Quart	$18.00
732225	Fossil Fuel™	Gallon	$40.00
732230	Fossil Fuel™ *Not stocked in all locations	2.5 Gallon	$75.00
732235	Fossil Fuel™ *Not stocked in all locations	5 Gallon	$135.00

ORGANIC

The humic acids in Europonic® FossilFuel® are derived from Leonardite, which is the best source for humic acids. Biologically, humic acids increase production of plant enzymes; act as an organic catalyst in biological processes; stimulate the production of micro-organisms; enhance natural resistance against plant disease and pests; aid in the uptake of nutrients through improved permeability of plant cells; provide building blocks for sugars, amino acids, and chlorophyll; stimulate plant growth by increasing cell division; and improve yields by decreasing plant stress.

ORCHID FOCUS

Item No.	Description	Size	MSRP
732785	Orchid Focus Grow	8 oz.	$6.95
732786	Orchid Focus Grow (SO)	Quart	$15.95
732787	Orchid Focus Bloom	8 oz.	$6.95
732788	Orchid Focus Bloom (SO)	Quart	$15.95

Orchid Focus is a dedicated and highly specialized nutrient solution for orchids and is based on over twenty years experience of formulations for commercial growers. Orchid Focus Grow has high levels of nitrate derived nitrogen for healthy shoots and leaves. Orchid Focus Bloom has enhanced levels of phosphorous and potassium to support heavy flowering. Both formulations contain a complex profile of minerals and organic compounds.

Aurora Innovations developed the roots organics product line with the goal of maximizing yields and flavors using organic ingredients. Working with a team of tissue culturists, plant scientists, botanist and doctors we have formulated a variety of superior, organic gardening products with internationally sourced ingredients.

ROOTS ORGANICS BUDDHA BLOOM 0.5 - 2 - 1.5 & BUDDHA GROW 2 - 0.5 - 1.5

Item No.	Description	Size	MSRP
715195	Buddha Bloom	Quart	$15.95
715200	Buddha Bloom	Gallon	$43.95
715205	Buddha Bloom	2.5 Gallon	$95.95
715210	Buddha Bloom	5 Gallon	$183.95
715175	Buddha Grow	Quart	$15.95
715180	Buddha Grow	Gallon	$43.95
715185	Buddha Grow	2.5 Gallon	$95.95
715190	Buddha Grow (SO)	5 Gallon	$183.95

ORGANIC

Buddha Bloom is a proprietary blend of the finest organic ingredients specifically created to promote vigor, increase yields and enhance quality in soil grown plants during their flowering stage. Worldwide sourcing and deliberate design formulated into an exceptional liquid blend, targeted to encourage excellence from your plants.

Buddha Grow is a proprietary blend of the finest organic ingredients specifically created to promote vigor, increase yields and enhance quality in soil grown plants during their vegetative stage. Worldwide sourcing and deliberate design formulated into an exceptional liquid blend, targeted to encourage excellence from your plants.

ROOTS ORGANICS TRINITY CATALYST

Item No.	Description	Size	MSRP
715005	Trinity Catalyst	Quart	$24.95
715010	Trinity Catalyst	Gallon	$65.95
715015	Trinity Catalyst	2.5 Gallon	$149.95
715020	Trinity Catalyst	5 Gallon	$279.95

ORGANIC

This complex liquid blend of organic compounds is specifically designed for maximum effect as a plant, root, and rhizoshpere catalyst. This exclusive formula is a universal supplement for both growth and bloom. The ingredient list includes such products as complex organic Saponins, soy extract, yeast extract, kelp extract, humic acid, fulvic acid, and L-aminos to name a few. All of these have been combined to encourage plant vigor, reduce stress, accelerate growth, and increase yield.

ROOTS ORGANICS HP² LIQUID BAT GUANO 0 - 4 - 0

Item No.	Description	Size	MSRP
715025	HP² Liquid Bat Guano	Quart	$15.95
715030	HP² Liquid Bat Guano	Gallon	$44.95
715035	HP² Liquid Bat Guano	2.5 Gallon	$104.95
715040	HP² Liquid Bat Guano	5 Gallon	$197.95

ORGANIC

This unique organic liquid bat guano is a specially extracted source of natural phosphorous specifically designed to enhance flower quality. Carefully collected from exclusive global sources, our product is minimally processed to preserve all of the benefits and amazing synergistic qualities found in bat guano. In a liquid form, bat guano is easier to use, more concentrated, eliminates worries about dust-born pathogens, is immediately available, and incredibly effective. HP² can be added to any fertilizer program in soil or hydroponics (particularly coco mediums) for noticeable increases in quality and fragrance.

ROOTS ORGANICS HPK BAT GUANO & K-MAG 0 - 5 - 4

Item No.	Description	Size	MSRP
715045	HPK Bat Guano & K-Mag	Quart	$17.95
715050	HPK Bat Guano & K-Mag	Gallon	$47.95
715055	HPK Bat Guano & K-Mag	2.5 Gallon	$111.95
715060	HPK Bat Guano & K-Mag	5 Gallon	$209.95

ORGANIC

This distinctive organic PK liquid bloom booster is specially extracted from our unique natural sources of phosphorous and potassium. Bat guano, renowned as an unparalleled organic source of phosphorous, is combined with Langbeinite, a natural source of potassium mined from ancient sea beds in the American southwest. Carefully collected from around the globe, HPK is minimally processed to preserve all of the benefits and amazing synergistic qualities found in our exceptional ingredients. HPK is incredibly effective in improving flower quality and is for use in both soil and hydroponics.

ROOTS ORGANICS ANCIENT AMBER

Item No.	Description	Size	MSRP
715065	Ancient Amber	Quart	$17.95
715070	Ancient Amber	Gallon	$45.95
715075	Ancient Amber	2.5 Gallon	$91.95
715080	Ancient Amber	5 Gallon	$147.95

ORGANIC

Using a unique organic extraction method, our product has been targeted for low molecular weight which increases bio-availability and effectiveness to unparalleled levels. Fulvic acids are extremely effective chelating agents, facilitating the uptake of micro and macro nutrients, increasing resistance to stress, and boosting overall vigor, thereby producing larger, better quality harvests. Ancient Amber is compatible with any fertilizer program but is most effective when used as a foliar spray or in hydroponic systems.

ROOTS ORGANICS EXTREME SERENE 0 - 2 - 2

Item No.	Description	Size	MSRP
715085	Extreme Serene	Quart	$32.95
715090	Extreme Serene	Gallon	$89.95
715095	Extreme Serene	2.5 Gallon	$211.95
715100	Extreme Serene (SO)	5 Gallon	$399.95

ORGANIC

An organic liquid kelp extract which provides a natural source of growth promoting compounds and micronutrients. Specifically designed to encourage vigorous growth, increase flower sites and increase yields, this distinctive blend of amazing plant extracts also includes a built in organic wetting agent. Extreme Serene can be used in conjunction with any nutrient program or as a foliar feed for exceptional results.

ROOTS ORGANICS OREGONISM XL

Item No.	Description	Size	MSRP
715130	Oregonism XL	1.8 oz.	$11.95
715135	Oregonism XL	4 oz.	$19.95
715140	Oregonism XL	8 oz.	$29.95
715145	Oregonism XL	1 lb	$55.95
715150	Oregonism XL	3 lb	$145.95
715155	Oregonism XL (SO)	6 lb	$259.95

ORGANIC

A distinctive super-soluble formulation of endo/ecto-mycorrhizae, beneficial bacteria, and Trichoderma. Mycorrhizae colonize the root zone, forming a symbiosis with the plant's roots, massively increasing the size and effective surface area, facilitating greater nutrient uptake, resistance to disease, and increased tolerance to drought. The beneficial bacteria and Trichoderma in this unique product also produce plant and root growth promoting compounds and protect against pathogens.

ROOTS ORGANICS NITRO BAT GUANO 9 - 3 - 1

ORGANIC

NEW!

Item No.	Description	Size	MSRP
720940	Nitro Bat Guano	3 lb	$14.99
720945	Nitro Bat Guano	9 lb	$35.99
720950	Nitro Bat Guano	20 lb	$59.99
720955	Nitro Bat Guano	44 lb	$99.99

Roots Organics Nitro Bat Guano is an excellent source of nitrogen, phosphorus, and calcium. Carefully processed and sifted to make it easy to work with, Roots Organics Nitro Bat Guano encourages vigorous growth and is fast acting for quick results. All of the Roots Organics guanos have been carefully sourced for quality and harvested with bat friendly methods so you and your garden get performance with principles. 100% naturally occurring Bat Guano. No additives. No filler.

ROOTS ORGANICS SUPER NITRO BAT GUANO 15.5 - 1 - 1

ORGANIC

NEW!

Item No.	Description	Size	MSRP
720960	Super Nitro Bat Guano	3 lb	$29.99
720965	Super Nitro Bat Guano	9 lb	$79.99
720970	Super Nitro Bat Guano	20 lb	$149.99
720975	Super Nitro Bat Guano	44 lb	$279.99

Roots Organics Super Nitro Bat Guano is incredibly high in Nitrogen and is extracted only from select caves when the quality is at its highest. Potent and powerful high nitrogen guano consciously extracted to not disturb the bat colonies but provide an unparalleled completely natural source of nitrogen. Roots Organics Super Nitro Bat Guano is fast acting and is so powerful it should be used carefully and sparingly. All of the Roots Organics guanos have been carefully sourced for quality and harvested with bat friendly methods so you and your garden get performance with principles. 100% naturally occurring Bat Guano. No additives. No filler.

ROOTS ORGANICS PHOS BAT GUANO 0 - 7 - 0

ORGANIC

NEW!

Item No.	Description	Size	MSRP
720980	Phos Bat Guano	3 lb	$11.99
720985	Phos Bat Guano	9 lb	$29.99
720990	Phos Bat Guano	20 lb	$53.99
720995	Phos Bat Guano	44 lb	$67.99

Roots Organics Phos Bat Guano is an excellent source of phosphorus and calcium. Carefully processed and sifted to make it easy to work with, Roots Organics Phos Bat Guano encourages vigorous flowering and fruiting. All of the Roots Organics guanos have been carefully sourced for quality and harvested with bat friendly methods so you and your garden get performance with principles. Roots Organics 100% naturally occurring Bat Guano. No additives. No filler.

ROOTS SOUL SYNTHETICS GROW 3 - 1.25 - 1.25

NEW!

Item No.	Description	Size	MSRP
715250	Soul Synthetics Grow	Quart	$15.95
715255	Soul Synthetics Grow	Gallon	$47.95
715260	Soul Synthetics Grow	2.5 Gallon	$107.95
715265	Soul Synthetics Grow	5 Gallon	$199.95

Soul Synthetics Grow is a synergistic blend of highly soluble synthetic fertility components enhanced with powerful organic extracts for both maximum yields and spectacular flavor. It was designed specifically for increased yields and enhanced quality in versatile and demanding applications. Formulated from only the highest quality organic and synthetic ingredients and targeted to increase plant vigor for larger harvests. Soul Synthetics Grow is balanced for more of what a plant needs during its vegetative growth stage, and was purposely created to be user friendly and pH stable. Great for both soil and hydroponic gardening.

ROOTS SOUL SYNTHETICS BOOM 1.5 - 4.5 - 3

NEW!

Item No.	Description	Size	MSRP
715270	Soul Synthetics Bloom	Quart	$15.95
715275	Soul Synthetics Bloom	Gallon	$47.95
715280	Soul Synthetics Bloom	2.5 Gallon	$107.95
715285	Soul Synthetics Bloom	5 Gallon	$199.95

Soul Synthetics Bloom is a synergistic blend of highly soluble synthetic fertility components enhanced with powerful organic extracts for both maximum yields and spectacular flavor. It was designed specifically for increased yields and enhanced quality in versatile and demanding applications. Formulated from only the highest quality organic and synthetic ingredients and targeted to increase flower density for larger harvests. Soul Synthetics Bloom is balanced for more of what a plant needs during its bloom stage, and was purposely created to be user friendly and pH stable. Great for both soil and hydroponic gardening.

ROOTS SOUL SYNTHETICS GROW-N 8 - 0 - 0

NEW!

Item No.	Description	Size	MSRP
715310	Soul Synthetics Grow-N	Quart	$17.95
715315	Soul Synthetics Grow-N	Gallon	$49.95
715320	Soul Synthetics Grow-N	2.5 Gallon	$115.95
715325	Soul Synthetics Grow-N	5 Gallon	$215.95

Soul Synthetics Grow-N nitrogen supplement was specifically crafted for the gardener that demands faster growth from super available high performance fertilizers. A deliberate blend of organic and synthetic nitrogen and calcium sources intentionally designed for maximum effect and high solubility puts the controlled application of these essential nutrients in your hands. This highly soluble, fast acting product can be used as an additive in conjunction with any base nutrient program for exceptional results.

ROOTS SOUL SYNTHETICS AMINO AIDE 5 - 0 - 0

NEW!

Item No.	Description	Size	MSRP
715290	Soul Synthetics Amino Aide	Quart	$43.95
715295	Soul Synthetics Amino Aide	Gallon	$143.95
715300	Soul Synthetics Amino Aide	2.5 Gallon	$339.95
715305	Soul Synthetics Amino Aide	5 Gallon	$639.95

Soul Synthetics Amino Aide plant supercharger is a complex amino acid blend specifically formulated to increase plant vigor and yields. Chemists at Aurora Innovations created this blend of Amino Acids after extensive, hands-on research into compounds that can be beneficial for plant growth and yields. When used properly in conjunction with a high quality nutrient line Amino Aid can substantially increase yields. Great for both soil and hydroponic gardening.

ROOTS SOUL SYNTHETICS BIG SWELL 2 - 5 - 3

Item No.	Description	Size	MSRP
715330	Soul Synthetics Big Swell	Quart	$43.95
715335	Soul Synthetics Big Swell	Gallon	$143.95
715340	Soul Synthetics Big Swell	2.5 Gallon	$339.95
715345	Soul Synthetics Big Swell	5 Gallon	$639.95

NEW!

Soul Synthetics Big Swell bloom booster has been designed specifically to increase flower size, vigor, density, and quality. Our extensive hands-on research has resulted in a distinctive formula of botanical extracts, amino acids, and versatile carbohydrates combined with a specific ratio of readily available phosphorus and potassium. Soul Synthetics Big Swell can be used as an additive for increased yields in conjunction with any quality base nutrient program for exceptional results.

ROOTS SOUL SYNTHETICS INFINITY .5 - 2.5 - 1.5

Item No.	Description	Size	MSRP
715350	Soul Synthetics Infinity	Quart	$24.95
715355	Soul Synthetics Infinity	Gallon	$65.95
715360	Soul Synthetics Infinity	2.5 Gallon	$149.95
715365	Soul Synthetics Infinity	5 Gallon	$279.95

NEW!

Soul Synthetics Infinity catalyst is a complex blend of powerful organic compounds combined with choice plant nutrition. Infinity is specially formulated to increase vigor and prevent micronutrient deficiencies common in fast growing and heavy feeding plants. With its proprietary blend of distinct ingredients, Soul Synthetics Infinity can be used with any nutrient program for increased micronutrient uptake and as a powerful plant supplement. Great for both soil and hydroponic gardening.

ROOTS SOUL SYNTHETICS PEAK 0 - 12 - 7

Item No.	Description	Size	MSRP
715370	Soul Synthetics PeaK	Quart	$23.95
715375	Soul Synthetics PeaK	Gallon	$74.95
715380	Soul Synthetics PeaK	2.5 Gallon	$164.95
715385	Soul Synthetics PeaK	5 Gallon	$299.95

NEW!

Soul Synthetics PeaK bloom finisher contains unique, proprietary botanical extracts as well as ample phosphorus and potassium to encourage the highest density in flowering. Years of research and extensive testing have resulted in a distinctive PK formulation designed to enhance strength and vigor in all of your plants during their final blooming phase. Soul Synthetics PeaK supports the development of intense features and show quality blooms in your favorite flowers. Great for both soil and hydroponic gardening.

DUTCH™ master

If you demand the best results. If you work longer and harder in your garden so you can stay ahead of the pack – then GOLD NUTRIENT is your first choice! GOLD NUTRIENT is revolutionary! Forget those other brands, this powerful new 2 part (Part A & Part B) grow and flower nutrient took 6 years to design and perfect - and the results will amaze you! Every batch is independently lab tested for consistency prior to bottling so we can guarantee that the next bottle of GOLD NUTRIENT you buy is identical to the last!

GOLD NUTRIENTs unique ionic technology delivers massive amounts of the best available nutrition to your plants – far above that of any inferior product. By providing a unique ionic charge to the elements contained within GOLD NUTRIENT, we unlock nature's awesome genetic power! Designed specifically for use with all growing media, GOLD NUTRIENTs high performance action performs equally well in any grow system – truly universal! Try it today and unlock the power in your garden!

GOLD NUTRIENT GROW PART A 5 - 0 - 2.9 & B 1.5 - 1 - 3.5

Item No.	Description	Size	MSRP
719242	Gold Nutrient Grow Part A	1 Liter	$11.98
719247	Gold Nutrient Grow Part A	5 Liter	$39.48
719257	Gold Nutrient Grow Part A	20 Liter	$137.98
719243	Gold Nutrient Grow Part B	1 Liter	$11.98
719248	Gold Nutrient Grow Part B	5 Liter	$39.48
719258	Gold Nutrient Grow Part B	20 Liter	$137.98

GOLD NUTRIENT FLOWER PART A 4.5 - 0 - 6.5 & B 0.5 - 5.3 - 6.3

Item No.	Description	Size	MSRP
719262	Gold Nutrient Flower Part A	1 Liter	$11.98
719267	Gold Nutrient Flower Part A	5 Liter	$39.48
719271	Gold Nutrient Flower Part A	20 Liter	$137.98
719263	Gold Nutrient Flower Part B	1 Liter	$11.98
719268	Gold Nutrient Flower Part B	5 Liter	$39.48
719272	Gold Nutrient Flower Part B	20 Liter	$137.98

GOLD ADD.27 GROW & FLOWER

Item No.	Description	Size	MSRP
719580	Gold Add.27 Grow	1 Liter	$24.95
719585	Gold Add.27 Grow	5 Liter	$99.95
719581	Gold Add.27 Flower	1 Liter	$24.95
719586	Gold Add.27 Flower	5 Liter	$99.95

GOLD ADD.27 is unlike any mineral based additive you have ever used before! GOLD ADD.27 is the world's first Specialized Mineral and Amino Acid based additive that optimizes your nutrient and ADD's dramatically - TO ITS PERFORMANCE!

GOLD ADD.27 adds power to your regular nutrient or mineral based supplements by helping to optimize the rate of cytoplasmic streaming. Put simply, the cytoplasmic stream is like a fluid based conveyor belt within the plant that delivers all the minerals, enzymes, co-factors etc that the plant requires to grow and develop naturally, right into the cell. Quite often, through external influences eg. pH shift, temperature etc, this conveyor belt can be slow and un-optimized resulting in very average results. Optimized cytoplasmic streaming allows your nutrients and additives to work at their intended performance level - delivering to you, your plants full natural genetic potential!

GOLD LIQUID LIGHT

Item No.	Description	Size	MSRP
719277	Gold Liquid Light	1 Liter	$59.95
719278	Gold Liquid Light	5 Liter	$199.95

It's a known fact that plants don't process light anywhere near as well as they should. If they could process light closer to their genetic potential the results would shock you. Well get ready to be shocked!!

GOLD LIQUID LIGHT puts your plants into overdrive by helping to restore their lost natural photosynthetic power. Liquid Light does this by providing your plants with selected minerals, carbohydrates, amino-acids and phyto-nutrients that optimizes the Calvin Cycle, a critical cycle of photosynthesis. By restoring a large portion of a plants' natural genetic photosynthetic speed, or power, plants are able to use a lot more of the precious light you provide them. GOLD LIQUID LIGHT is also one of today's most advanced and most effective Carbohydrate supplements. GOLD LIQUID LIGHT contains a specially selected premium suite of carbohydrates to naturally help your plants process all that light.

GOLD ZONE .09 - 0 - 0.26

Item No.	Description	Size	MSRP
719430	Gold Zone	1 Liter	$23.95
719435	Gold Zone	5 Liter	$87.95

We all know that fast growing plants have a big demand for food and water but did you know that if your root system is not optimized then your plants might be missing out on the ability to uptake all that they need? Trusted around the world by countless growers, ZONE ensures that your root system and environment are optimized so that your plants take up to 100% of what they need - all of the time!

ZONE is specially formulated for use as a full time maintenance program outperforming everything in its class and is your frontline tool of choice for the ultimate root zone environment! Don't leave your root zone in the hands of just any product. Choose the one trusted by thousands of growers worldwide. Choose ZONE! Designed specifically for Hydro, Soil and Coco, ZONE's high performance action performs equally well in any media or any system – truly universal! Try it today and unlock the power in your garden!

GOLD ONE GROW 2 - 0.3 - 3 & FLOWER 1.8 - 0.5 - 3.1

Item No.	Description	Size	MSRP
719280	Gold One Grow	1 Liter	$9.95
719285	Gold One Grow	5 Liter	$29.95
719300	Gold One Flower	1 Liter	$9.95
719305	Gold One Flower	5 Liter	$29.95

Dutch Master ONE is a Super Premium single part hydroponic nutrient available in both grow and flower formulations that combines high performance with ease of use - without the sludgy mess on the bottom of the bottle that typically happens with other single part nutrients!

Dutch Master ONE combines a unique calcium and sulphur binding technology together with a high performance, cutting edge nutrient formulation to provide you with a powerful nutrient that is crystal clear, with no fallout and assists your plants to grow and yield to their maximum natural genetic potential!

If you want ease of use, without the compromise in performance, then you need Dutch Master ONE! Designed specifically for use with all growing media, ONE's high performance action performs equally well in any grow system – truly universal!

GOLD PENETRATOR/SATURATOR 0 - 0 - 0

Item No.	Description	Size	MSRP
719405	Gold Penetrator/Saturator	1 Liter	$29.95
719406	Gold Penetrator/Saturator	5 Liter	$119.95

GOLD SATURATOR introduces a radical next generation technology that gives GOLD SATURATOR a unique dual action delivery that takes the nutrients or supplements that you spray on to your plants and delivers them deep inside the active leaf tissue where it is explosively released with high energy uncoupling, saturating the cells with your foliar payload! We achieve this via our proprietary Protrans Technology, a unique and exacting technology that piggybacks your foliar applied elements using custom designed high-energy proteins. The Results.... A new and exciting Second Generation Foliar Delivery Agent that performs totally superior to regular SATURATOR and DOUBLES THE POWER OF GOLD LIQUID LIGHT! GOLD SATURATOR should be used with any mineral / carbohydrate / amino-acid based specialty fertilizer foliar product to make it penetrate more effectively!

GOLD SILICA 0 - 0 - 2

Item No.	Description	Size	MSRP
719440	Gold Silica	1 Liter	$22.95

Dutch Master SILICA is a special formulation of plant available silicon, designed to help restore natural plant levels of silicon so your plant can build strong cell walls resulting in a well formed plant – just like they would if they were grown outside in the ground. When using a modern performance based nutrient like GOLD NUTRIENT, SILICA is essential to help maximise the results you get from these high tech wonder nutrients.

SILICA use should be started early in the vegetative stage and continued through until harvest for optimal results as SILICA'S benefits are optimized with long term use. Designed specifically for use with all growing media, SILICA's high performance action performs equally well in any system – truly universal! Try it today and unlock the power in your garden!

GOLD REVERSE 0 - .02 - .02

Item No.	Description	Size	MSRP
719390	Gold Reverse	1 Liter	$18.95

REVERSE is a ready to use (no dilution required) foliar spray that quickly and efficiently helps to bring peace to a grower's worst nightmare. . . .. awful seed problems!

The unique formulation of specialty minerals & amino acids enables REVERSE to help reduce that headache! Modern Science allows REVERSE to achieve this remarkable feat by channeling selected minerals and amino acids into the Mesophyll layer of the plant. This layer is responsible for most of a plants energy production (Photosynthesis) and more importantly is the starting point of all the metabolic pathways. Simply put, the selected minerals and amino acids provide your plants with the vigor they need to channel the correct metabolites in the pathways responsible for flowering, helping to correct any imbalances. End result for you when you use REVERSE... LESS MALE HEADACHES!

GOLD A.P.S .09 - .015 - .098

Item No.	Description	Size	MSRP
719445	Gold A.P.S	5 Liter	$17.95

A.P.S perfectly conditions Rockwool cubes for cuttings and as A.P.S is ready to use straight out of the bottle, using it is a snap! Improper Rockwool conditioning is the biggest reason why so many people fail to get the results they want when taking cuttings. A.P.S perfectly prepares your Rockwool to successfully accept your newly taken cuttings. A.P.S gently conditions your Rockwool cube to the perfect pH and bathes the cube in a gentle nutrient solution tailored specifically for newly taken cuttings.

A.P.S is also used as a highly effective foliar spray allowing your cuttings to grow while rooting! Simply add Dutch Master GOLD SATURATOR to the amount of A.P.S you want to spray and away you go! So what are you waiting for! It couldn't be any easier!

GOLD POTASH PLUS 0.7 - 4 - 11

Item No.	Description	Size	MSRP
719330	Gold Potash Plus	1 Liter	$16.95
719335	Gold Potash Plus	5 Liter	$43.95

POTASH+ is one of the most advanced root based phosphorus boosters in the world! Containing Premium grade multiple phosphorus types and synergistic micronutrients, POTASH+ is one of the best ways to maximise your plants natural genetic flowering potential!

POTASH+ has been scientifically formulated by a PhD Plant Physiologist to go beyond what standard NPK fertilizers can offer! Designed specifically for Hydro, Soil and Coco, POTASH+'s high performance action performs equally well in any media or any system – truly universal! Try it today and unlock the power in your garden!

ADVANCE still outperforms just about every other product in the market - at a budget price! The unique incorporation of rare earth minerals to assist Krebs Cycle Metabolism rockets your plants into the world of high performance! ADVANCE's unique formulation of mineral elements, amino acids and Krebs Metabolites will assist in the natural genetic acceleration of your plants metabolic rate. Isn't this exactly what you have been wanting – plants that perform to their true natural genetic maximum potential? Designed specifically for use with all growing media, ADVANCE's high performance action performs equally well in any grow system – truly universal! Try it today and unlock the power in your garden!

ADVANCE GROW PART A 2.54 - 0 - 1.65 & B 0.65 - 0.75 - 4.4

Item No.	Description	Size	MSRP
719201	Advance Grow Part A	1 Liter	$7.48
719206	Advance Grow Part A	5 Liter	$27.48
719202	Advance Grow Part B	1 Liter	$7.48
719207	Advance Grow Part B	5 Liter	$27.48

ADVANCE FLOWER PART A 2.4 - 0 - 2 & B 0.6 - 1 - 4

Item No.	Description	Size	MSRP
719221	Advance Flower Part A	1 Liter	$7.48
719226	Advance Flower Part A	5 Liter	$27.48
719236	Advance Flower Part A	20 Liter	$84.98
719222	Advance Flower Part B	1 Liter	$7.48
719227	Advance Flower Part B	5 Liter	$27.48
719237	Advance Flower Part B	20 Liter	$84.98

MAX-FX GROW 0.5 - 0.6 - 1.8 & FLOWER 0.114 - 1 - 1.65

Item No.	Description	Size	MSRP
719380	Max-FX Grow	1 Liter	$30.95
719382	Max-FX Grow (S0)	5 Liter	$122.95
719385	Max-FX Flower	1 Liter	$30.95
719387	Max-FX Flower (S0)	5 Liter	$122.95

MAX-FX is a unique foliar spray that has been Clinically Proven to deliver Amino Acids and Complex Carbohydrates inside your plants! Amino Acids and Complex Carbohydrates can help your plants achieve amazing things – but only if they get inside the leaves!

What our competitors won't tell you is that plants can't physically take up much of the Complex Carbohydrates and Amino Acids through their roots - imagine that! It is the molecular size that is too big for effective absorption through the roots whereas, the leaves can accept the larger molecules much easier! If Carbohydrates and Amino Acids cannot get to the leaves from the roots – they are completely worthless! The only effective way to get Amino Acids and Complex Carbohydrates to the leaves - is through the leaves - we proved it! We commissioned a series of ground breaking University studies that showed MAX-FX, when used with GOLD SATURATOR, was able to the deliver Amino Acids and Complex Carbohydrates to where they were needed - into your plants leaves!

MAX GROW 1 - 1 - 5 & FLOWER .11 - 2 - 3

Item No.	Description	Size	MSRP
719350	Max Grow	1 Liter	$17.95
719355	Max Grow	5 Liter	$67.95
719370	Max Flower	1 Liter	$17.95
719375	Max Flower	5 Liter	$67.95

Strong, problem free plants produce more, a lot more! MAX is legendary for providing assistance from problems caused by over or under watering, over fertilizing, excessive heat and light.

MAX comes in both grow and flower formulations that provide a unique blend of nutrients that help the plant to maximize its nutrient sinks. Nutrient sinks are specialized reservoirs of starches, carbohydrates and minerals that your plants store at the base of their leaves. These natural specialized reservoirs of nutrients allow the plant to maintain healthy growth and flowering patterns if the supply from the roots becomes temporarily compromised in any way, such as when the plant is under stress. Unfortunately these reserves are often not large enough to fully guard against plant stresses. MAX is essential if you want to maintain your flowers in peak condition. MAX allows your flowers to remain in their peak state for longer, literally bursting with freshness and color! Use MAX Flower whenever you need your flowers to retain that full bloom look for the ultimate in presentation! Designed specifically for Hydro, Soil and Coco, MAX's high performance action performs equally well in any media or any system – truly universal!

FOLITECH GROW .15 - .05 - .3 & FLOWER .06 - .13 - .3

Item No.	Description	Size	MSRP
719410	Folitech Grow	1 Liter	$30.95
719415	Folitech Grow (S0)	5 Liter	$122.95
719420	Folitech Flower	1 Liter	$30.95
719425	Folitech Flower (S0)	5 Liter	$122.95

You know the situation, you've been there before and it's not pretty, you've over fed your plants and now they are not happy! This is going to cost you BIG TIME! Or is it? Stop the sadness now and get your plants back to growing at their full natural genetic speed with FOLITECH!

A unique and powerful Foliar Spray, FOLITECH is absolutely the best instantaneous problem relieving product on the market! If your plants are stressed then they are not growing to their full potential. FOLITECH assists your plants to recover from problematic conditions almost immediately, effectively maintaining normal, natural growth rates and patterns. Together with MAX or GOLD ADD.27 this is the best "one – two" problem solving program you can use! FOLITECH is available in both grow and flower formulations. FOLITECH should always be used as directed below to help maintain vigorous natural growth and vitality.

Phosphoload

PHOSPHOLOAD .3 - .7 - .1

Item No.	Description	Size	MSRP
719443	Phosphoload	1 Liter	$119.95

Phospoload is the original power flower additive. It's unique phosphorus profile immediately channels the plants energies to commence flowering. Flowers can be seen forming in as little as 3 days after the addition of Phosphoload. Flower production is increased up to 50% with larger more numerous blooms forming. Phosphoload for real big flowers, real fast!

GROTEK™
SCIENCE FOR PLANTS

VITAMAXPLUS™ PLANT FORMULA 1 - 1 - 2

Item No.	Description	Size	MSRP
718855	VitaMaxPlus™	1 liter	$21.95
718860	VitaMaxPlus™	4 liter	$72.95
718862	VitaMaxPlus™	10 liter	$143.95

VitaMax Plus™ is specially formulated to improve plant growth. The VitaMax Plus™ formula was originally designed for use in plant laboratories or greenhouses. It encourages better root development, larger buds, blooms, fruits and flowers by developing a robust plant system. Vitamax Plus™ contains essential primary and secondary nutrients necessary for optimal growth. Great for transplanting and rooting.

INSTAGREEN™ 3 - 0 - 0

Item No.	Description	Size	MSRP
718900	InstaGreen™	1 liter	$11.19
718902	InstaGreen™ (SO)	4 liter	$31.95

InstaGreen™ is a dark greening solution, scientifically formulated to bring plants back to a lush, dark color and vigor. InstaGreen™ will eliminate yellow leaves in seedlings and cuttings. Use InstaGreen™ when plants are stressed due to under-feeding or transplanting until vigor has returned. Best used as a foliar spray in both indoor and outdoor applications.

PRO-SILICATE™ 0 - 0 - 3.8

Item No.	Description	Size	MSRP
718890	Pro-Silicate™	1 liter	$11.74
718895	Pro-Silicate™	4 liter	$32.91

Pro-Silicate™ is a nutritional silicate additive containing potassium and silicon. It helps keep the plants upright, positioning the leaves correctly for maximum light exposure that ultimately leads to more food production because of a high rate of photosynthesis. Pro-Silicate™ helps the plant battle wilting and drought by acting as insulation against excess water loss at higher temperatures. This helps increase plant growth and prolongs bloom life.

MONSTER GROW™ 12 - 7 - 15

Item No.	Description	Size	MSRP
718840	Monster Grow™	130g	$11.95
718845	Monster Grow™	500g	$37.95

Monster Grow™ is a high nitrogen fuel for high performance growing that gives an added boost to your plants while they are in the vegetative stage. It is designed to be used only once to give your plants an additional push to produce extra lush green vegetative growth.

MONSTER BLOOM™ 0 - 50 - 30

Item No.	Description	Size	MSRP
718820	Monster Bloom™	130g	$11.69
718825	Monster Bloom™	500g	$38.95
718830	Monster Bloom™	2.5 Kg	$181.95
718835	Monster Bloom™	5 Kg	$341.95

Monster Bloom™ is designed to increase the plant's ability to flower. It increases the essential oil content in herbs and speeds up the development of flower bud set and the total flowering phase. Monster Bloom™ adds size and mass to flowers in the budding and flowering cycles. Stop using the last two weeks of the flowering cycle.

CAL-MAX™ 2 - 0 - 0

Item No.	Description	Size	MSRP
732960	Cal-Max™	1 liter	$11.59
732970	Cal-Max™	4 liter	$37.57

An excellent source of additional calcium, magnesium and iron, Cal-Max™ can be used on all plants, providing calcium, magnesium and iron for your garden. This helps solve one of the most common nutrient deficiency problems facing fruit and vegetable growers as many soils or potting mixes simply do not have enough of those nutrients to keep the hungry plants growing. Using Cal-Max™ as part of your regular feeding program will help to eliminate leaf yellowing or flowers dropping off. It helps prevent tip burning in lettuce and cabbage as well as blossom rot in tomatoes and peppers. Use Cal-Max™ and enjoy the fruits (and vegetables) of your labor!

HEAVY BLOOM™ 0 - 1 - 2

Item No.	Description	Size	MSRP
732761	Heavy Bloom™	1 liter	$20.19

Heavy Bloom™ is a flowering supplement that is specially designed to be used during the reproductive stage of plant growth to help increase the number and size of blooms/fruits and ultimately final yield. For use on all indoor/outdoor flowers, fruits and vegetables. For commercial or home and garden use. Use in conjunction with your regular fertilizer.

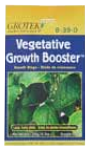
BLOOM FUEL™ 0 - 0 - 2

Item No.	Description	Size	MSRP
732763	Bloom Fuel™	1 liter	$20.99
732765	Bloom Fuel™	4 liter	$58.99

Bloom Fuel™ is a flowering supplement designed to be used alongside your regular fertilizer program. Begin adding Bloom Fuel™ half way through vegetative growth to encourage a flowering response. Must be used in conjunction with your regular feeding progam (preferably a flower feeding nutrient). For use on all indoor/outdoor flowers, fruits and vegetables. For commercial or home and garden use.

VEGETATIVE GROWTH BOOSTER™ 8 - 39 - 0

Item No.	Description	Size	MSRP
732975	Vegetative Growth Booster™	20g	$14.99
732977	Vegetative Growth Booster™ (SO)	300g	$146.99



Vegetative Growth Booster™ is a specially formulated product for vegetative growth. Use Growth Booster to increase development in the early stages of growth. Vegetative Growth Booster™ gives high performance in all mediums. When you are looking for full and vibrant green leaves, use Vegetative Growth Booster™.

BLOSSOM BLASTER™ 0 - 39 - 25

Item No.	Description	Size	MSRP
732980	Blossom Blaster™	20g	$10.69
732982	Blossom Blaster™	300g	$134.99

Blossom Blaster™ is a powerful blend of phosphorous and potassium fertilizers. Use Blossom Blaster™ to add size to your blossoms by adding it to your nutrient solution just before flowers are starting to form. It supplies the plant with a reliable source of nutrition in the area where blossoms are developing. Blossom Blaster™ gives high performance in all mediums. • Use only 2x during flowering cycle. • Use only with change of nutrient.

TECHNAFLORA PLANT PRODUCTS LTD

PURA VIDA™ GROW 6 - 4 - 3 & BLOOM 2 - 6 - 6

Item No.	Description	Size	MSRP
726717	Pura Vida™ Grow	1 Liter	$30.24
726718	Pura Vida™ Grow	4 Liter	$59.94
726719	Pura Vida™ Grow	10 Liter	$136.90
726720	Pura Vida™ Grow	20 Liter	$241.44
726722	Pura Vida™ Bloom	1 Liter	$30.24
726723	Pura Vida™ Bloom	4 Liter	$59.94
726724	Pura Vida™ Bloom	10 Liter	$136.90
726725	Pura Vida™ Bloom	20 Liter	$241.44

PURA VIDA™ GROW & BLOOM - Formulated from various plant materials and subjected to a fermentation process, Pura Vida™ Grow and Pura Vida™ Bloom contain sufficient organic nitrogen (N), phosphorous (P) and potassium (K), along with essential micro nutrients to sustain rapid, aggressive growth during the vegetative stage and to produce abundant fragrant flowers and mature fruits during the flowering/fruiting stages. Pura Vida™ Grow specifically targets the vegetative growth phase rapidly creating lush green foliage, while Pura Vida™ Bloom is formulated to promote and maximize the flowering and fruiting performance of plants during the reproductive stage.

SUGAR DADDY™

Item No.	Description	Size	MSRP
726732	SugarDaddy™	1 Liter	$25.89
726734	SugarDaddy™	4 Liter	$79.24
726736	SugarDaddy™	10 Liter	$177.54
726738	SugarDaddy™ (SO)	20 Liter	$302.99

The unique combinations of ingredients in SugarDaddy are vital for all stages of plant growth and development. During the seedling stage SugarDaddy rapidly accelerates sprout growth and prepares plants for transplanting. During the vegetative stage SugarDaddy promotes strong plant structure which is a critical precursor to final yield success. Not for sale in CA at the time of this catalog printing.

THRIVE ALIVE B-1™ RED 1 - 1 - 1 & THRIVE ALIVE B-1™ GREEN 1 - 1 - 1

Item No.	Description	Size	MSRP
720605	Thrive Alive B-1™ Red	250 ml	$18.52
720610	Thrive Alive B-1™ Red	500 ml	$31.45
720615	Thrive Alive B-1™ Red	1 Liter	$45.61
720620	Thrive Alive B-1™ Red	4 Liter	$139.70
720630	Thrive Alive B-1™ Green	250 ml	$19.97
720635	Thrive Alive B-1™ Green	500 ml	$33.30
720640	Thrive Alive B-1™ Green	1 Liter	$49.96
720645	Thrive Alive B-1™ Green	4 Liter	$153.62

OMRI™ Listed

ORGANIC

Thrive Alive B-1™ is a power packed preventative and restorative general-purpose plant tonic. It stimulates rapid and lush vegetative growth, and will ensure the success of floral crops by promoting profuse flowering during blossoming. Its professionally balanced formulation contains vitamins and nutrients, which are cultured in premium sea kelp. Thrive Alive™ is safe and easy to use for both hydroponic and soil applications (½ Tablespoon per Gallon; 2-3 ml per Liter), facilitating vigorous and healthy root development for both cuttings and established root systems, while protecting your plants from transplant-related shock.

ROOT 66™ 1 - 1 - 1

Item No.	Description	Size	MSRP
720691	Root 66™	250 ml	$23.75
720692	Root 66™	1 Liter	$80.77
720693	Root 66™ (SO)	4 Liter	$296.99
720694	Root 66™ (SO)	10 Liter	$712.79

ROOT 66 is an organic based nutrient blend that is comprised of seaweed extracts, trace elements, and polysaccharides. It promotes the exceptional development of a well balanced root structure, which is a vital component of overall plant growth and performance. At transplanting, ROOT 66 improves the establishment of seedlings and cutting by stimulating adventitious root development. ROOT 66 can be applied to soil, soilless and hydroponic based gardening mediums and can be used in conjunction with any premium quality fertilizer.

RECIPE FOR SUCCESS KIT

Item No.	Description	MSRP
726740	Recipe For Success Start Kit	$35.63

The Recipe for Success Starter Kit is ideal for both the new and experienced gardener alike. This self-contained package of exceptional products includes everything required to set you on the right course for gardening success. The Recipe for Success Starter Kit consists of B.C Bloom, B.C Boost, B.C Grow, Thrive Alive B-1 Red, Thrive Alive B-1 Green, Awesome Blossoms, Rootech Cloning Gel, MagiCal, SugarDaddy, ROOT 66 and the famous Recipe for Success mixing chart. The mixing chart shows the customer how to successfully use their nutrients in combination and for maximum benefit, from the cutting stages through to the flowering stages.

MAGICAL™ 2 - 0 - 0

Item No.	Description	Size	MSRP
716453	MagiCal™	1 Liter	$16.39
716455	MagiCal™	4 Liter	$57.37

MagiCal is a highly enriched formulated blend of Magnesium, Iron and Calcium that promotes vigorous and healthy plant growth for both soil and soilless gardens. When incorporated in your regular feeding program, MagiCal improves the nutritional quality of plants while reducing leaf chlorosis and deficiency related disorders such as blossom end rot, stem rot and tip burn. It also accelerates protein syntheses, maintains high starch content in crops, improves the density of fruit and the production of essential oils, creates lush and greener foliage, and maintains a healthy root system. Highly soluble—works in conjunction with any nutrient.

AWESOME BLOSSOMS™ 2 - 11 - 11

Item No.	Description	Size	MSRP
720655	Awesome Blossoms™	500 ml	$18.89
720660	Awesome Blossoms™	1 Liter	$37.00
720665	Awesome Blossoms™	4 Liter	$111.05
720670	Awesome Blossoms™ (SO)	10 Liter	$240.61

Awesome Blossoms™ is a scientifically blended superior flower stimulant designed to nurture prolific and bold blooms in all your flowering plants. This ultra-fertilizing tincture of super phosphates is formulated with macro and micro elements, stimulating dense, vigorous flowering. Awesome Blossoms™ fosters explosive flower growth, promoting heavier blooms at multiple budding sites. For use in both soil and soilless systems. It can be applied from the watering can, or mixed directly into hydroponic reservoirs.

B.C. BOOST 3 - 0 - 2

Item No.	Description	Size	MSRP
720540	B.C. Boost	1 Liter	$21.77
720545	B.C. Boost	4 Liter	$40.70
720550	B.C. Boost	10 Liter	$92.53
720555	B.C. Boost	20 Liter	$162.88

B.C. HYDROPONIC NUTRIENTS™ are a power-packed trio for nurturing generous vegetative crops and extraordinary floral growth. B.C. Boost, B.C. Bloom and B.C. Grow are complete, professionally formulated, highly concentrated fertilizing agents. Unlike other brands, which include micronutrients in only one part of the formula, both B.C. Grow and B.C. Bloom contain a full complement of micronutrients, which are bolstered by the added calcium and iron in B.C. Boost. This remarkable three-part fertilizer is easy to mix and control, with simple to follow mixing instructions printed on every label.

B.C. BLOOM 1 - 4 - 7 & B.C. GROW 1 - 3 - 6

Item No.	Description	Size	MSRP
720560	B.C. Bloom	1 Liter	$18.49
720565	B.C. Bloom	4 Liter	$37.00
720570	B.C. Bloom	10 Liter	$83.28
720575	B.C. Bloom	20 Liter	$131.14
720580	B.C. Grow	1 Liter	$18.49
720585	B.C. Grow	4 Liter	$37.00
720590	B.C. Grow (Special Order)	10 Liter	$83.28
720595	B.C. Grow (Special Order)	20 Liter	$131.14

SOLUBLE SEAWEED EXTRACT™ 1 - 1 - 16

Item No.	Description	Size	MSRP
720680	Seaweed Extract™	225g	$22.20

ORGANIC

OMRI™ Listed

Soluble Seaweed Extract™ is a concentrated, comprehensive gardener's tool in powder form. The concentrate is made from 100% pure, organic Norwegian kelp harvested on the Atlantic coast of Canada. This highest-quality kelp is a rich natural source of over 60 chelated nutrients, vitamins, amino acids and hormones that stimulate plant growth, and has been celebrated for its natural fertilizing properties for centuries. Enhanced seed germination, promotion of a healthy root system, and rapid stem and shoot development are among the recognized benefits of using this kelp extract.

B. SEAWEED™ 0 - 0 - 1

Item No.	Description	Size	MSRP
720685	B. Seaweed™	1 Liter	$42.56

ORGANIC

OMRI™ Listed

B. Seaweed™ is an optimal growth stimulant for all your plants. Technaflora's exceptional liquid extract is made from 100% pure, organic British Columbia kelp. Sea kelp is the source of more than 60 nutrients, vitamins, and hormones that support and strengthen hearty, thriving plants. In addition, sea kelp aids in the absorption of nutrients from the soil. B. Seaweed™ is ultra-concentrated, and must be diluted with water for use in irrigation solutions or as a foliar spray. Ideal as an additive for organic tea mixtures, versatile B. Seaweed™ is also a superior soil tonic, and can be added to the hydroponic reservoir with confidence.

VITA GROW

VITA GROW WATER CONDITIONER

Item No.	Description	Size	MSRP
732905	Vita Grow Water Conditioner	8 oz.	$21.95

The best product in the world for assuring faultless water application to plants. Vita Grow™ Water Conditioner conditions the water that is fed to plants so that the plants can grow to their full potential. It coats the plant food elements so that the elements on the plant food and soil have less chance to combine into unusable compounds.

B'CUZZ ATAMI™

B'CUZZ® BLOOM 0 - 0 - 0.7 & B'CUZZ® GROWTH 1.0 - 0 - 0.7

Item No.	Description	Size	MSRP
732025	B'Cuzz® Bloom	12 oz.	$20.95
732030	B'Cuzz® Bloom	Quart	$41.95
732035	B'Cuzz® Bloom	Gallon	$143.95
732040	B'Cuzz® Grow	12 oz.	$20.95
732045	B'Cuzz® Grow	Quart	$41.95
732050	B'Cuzz® Grow	Gallon	$143.95

Especially for the plant's blooming phase. B'Cuzz® Bloom encourages flower cell production and increases the manufacture and transport of sugar molecules in the flowers. This will lead to big, dense flowers and great taste. In this way, quantity as well as quality will increase on the final product.

B'Cuzz® Growth has been developed specifically to stimulate the growth phase and it is a necessary supplement to normal nutrition. It is an all-in-one growing stimulator, containing micro-nutrients, aqua-bacteria's, amino acids and proteins.

B'CUZZ® ROOT 0 - 0 - 0.7

Item No.	Description	Size	MSRP
732055	B'Cuzz® Root	12 oz.	$20.95
732060	B'Cuzz® Root	Quart	$41.95
732065	B'Cuzz® Root	Gallon	$143.95

Roots are necessary to the plant to provide a continuous supply of water, sugars, and mineral nutrients. The larger root system, the more dynamically the plant can function and grow. B'Cuzz® Root will initiate an explosive root production. B'Cuzz® Root solutions can be best used in cloning systems, and for young plants, cuttings, or seedlings.

B'CUZZ® TABZZ 0 - 12 - 15

Item No.	Description	MSRP
732069	B'Cuzz® Tabzz	$6.49

B'Cuzz® Blossom Builder Tabzz are 100% sizzling flower multipliers that ensures an explosive flower development in the flower phase. They make sure that all the strength of the plant is directed towards the flowers at the end of the growth. B'Cuzz® Tabzz can be used in earth, hydro, and coco applications. Derived from: Sodium Bicarbonate, Citric Acid, Mono Potassium Phosphate.

B'CUZZ® FOLIAR BOOST 0 - 0 - 0.6

Item No.	Description	Size	MSRP
732577	B'Cuzz® Foliar Boost (SO)	Quart	$29.95
732578	B'Cuzz® Foliar Boost (SO)	Gallon	$89.95

OMRI™ Listed

ORGANIC

B'cuzz® Foliar Boost is a 100% organic nutrient delivery system designed to optimize the penetration of foliar applied nutrients. B'cuzz® Foliar Boost is derived from the Yucca and Quillaja plants. Atami's bio technical engineers have taken extracts from these plants to create a certified organic surfactant and soil drenching solution that will ensure maximum delivery of all nutrient's, hormones and bio-stimulants through the leaves and the root zone of your plants.

B'CUZZ® FOLIAR 1.0 - 0 - 0

Item No.	Description	Size	MSRP
732067	B'Cuzz® Foliar (SO)	Quart	$29.95
732068	B'Cuzz® Foliar (SO)	Gallon	$89.95

OMRI™ Listed

ORGANIC

The very first OMRI certified foliar spray proven to enhance the performance of B'Cuzz® stimulators in all stages of plant development. The new B'Cuzz® Foliar contains all certified organic activators in one bottle (micronutrients, amino acids, cytokinins ,vitamins, esters, carbons) and are instantly available when used as a foliar spray.

B'CUZZ® HYDRO NUTRIENTS A 4 - 6 - 4 & B 0 - 4 - 6

Item No.	Description	Size	MSRP
732560	B'Cuzz® Hydro A (SO)	Quart	$15.95
732561	B'Cuzz® Hydro A (SO)	1.32 Gal	$50.95
732565	B'Cuzz® Hydro B (SO)	Quart	$15.95
732566	B'Cuzz® Hydro B (SO)	1.32 Gal	$50.95

B'Cuzz® Hydro Nutrients are composed of the purest raw materials with elements of Food Grade quality. B'Cuzz® Hydro Nutrients are entirely tailored to hydroponic substrate. Maximum growing output is achieved in this manner. B'Cuzz® Hydro Nutrition has outperformed in coco substrate as well. They are designed to work specifically in hydroponic applications.

B'CUZZ® SOIL NUTRIENTS A 3 - 0 - 3 & B 0 - 2 - 4

Item No.	Description	Size	MSRP
732569	B'Cuzz® Soil A (SO)	Quart	$15.95
732570	B'Cuzz® Soil A (SO)	1.32 Gal	$50.95
732574	B'Cuzz® Soil B (SO)	Quart	$15.95
732575	B'Cuzz® Soil B (SO)	1.32 Gal	$50.95

B'Cuzz® Soil Nutrients are composed of the purest raw materials with elements of Food Grade quality. B'Cuzz® Nutrients are entirely tailored to soil specific substrate leading to maximum output. They ensure biological balance in soil media. To ensure best results use in conjunction with B'Cuzz® Stimulants. Equal portions of A, then B are used continuously throughout out the plants life.

HUMBOLDT NUTRIENTS Grow, Micro, Bloom was created in Humboldt County to be a complete nutrient system for hydroponics and all growing mediums. Through extensive research and testing we have formulated an easy to use, highly effective fertilizing program.

Our three part nutrients can be utilized for all types of vegetables, flowers and herbs. In conjunction with our high powered additives, Humboldt Nutrients gives growers maximum flower and fruit production.

NATURAL BLOOM 0 - 10 - 0

Item No.	Description	Size	MSRP
723052	Natural Bloom	Quart	$26.39
723054	Natural Bloom	Gallon	$93.59
723056	Natural Bloom	2.5 Gallon	$222.29
723058	Natural Bloom	5 Gallon	$421.19

Humboldt Nutrients Bloom Natural is an ultra-concentrated organic bloom formula designed to give your plants the large phosphorus and calcium boost needed during the flowering period. Bloom Natural induces an immediate flowering response in flowering plants, encouraging multiple flowering sites. This produces a fuller crop, a higher quality yield, and more flavorful fruits.

Organically derived from Soft Rock Phosphate and kelp, this is the highest quality, and strongest premium organic base nutrient line available. The use of Bloom Natural promotes full flavors, aromas, and beautiful bouquets, only obtained by the use of rich and pure organic ingredients.

NATURAL GROW 3 - 1 - 3

Item No.	Description	Size	MSRP
723044	Natural Grow	Quart	$26.39
723046	Natural Grow	Gallon	$93.59
723048	Natural Grow (SO)	2.5 Gallon	$222.29
723050	Natural Grow (SO)	5 Gallon	$421.19

Organically derived, our Grow Natural is a blend of soy protein powder, soft rock phosphate, potassium sulfate, Organic zinc sulfate, magnesium sulfate, kelp, and Alaska Peat extracts. The base ingredients in Grow Natural will promote and facilitate the growth of beneficial bacteria and fungi in your growing media. This blend provides essential nutrients to all plants, along with crucial elements ready for "fixation" by the inoculated and existing beneficial bacteria in the soil.

The use of Grow Natural promotes full flavors, aromas, and beautiful bouquets, only obtained by the use of the rich and pure organic ingredients.

HUMBOLDT NUTRIENTS MICRO 5 - 0 - 1

Item No.	Description	Size	MSRP
723008	Humboldt Nutrients Micro	Quart	$15.79
723010	Humboldt Nutrients Micro	Gallon	$36.29
723012	Humboldt Nutrients Micro	2.5 Gallon	$83.09
723014	Humboldt Nutrients Micro	5 Gallon	$159.19

Micro contains three separate chelating agents, triple insurance against nutrients falling out of solution or nutrient lock-out. Humboldt Nutrients Micro has all the micronutrients necessary to create healthy plants, strong aromas, & large yields.

HUMBOLDT NUTRIENTS BLOOM 0 - 6 - 5 & GROW 2 - 1 - 6

Item No.	Description	Size	MSRP
723016	Humboldt Nutrients Bloom	Quart	$11.69
723018	Humboldt Nutrients Bloom	Gallon	$29.89
723020	Humboldt Nutrients Bloom	2.5 Gallon	$65.59
723022	Humboldt Nutrients Bloom (SO)	5 Gallon	$116.99
723000	Humboldt Nutrients Grow	Quart	$11.69
723002	Humboldt Nutrients Grow	Gallon	$29.89
723004	Humboldt Nutrients Grow	2.5 Gallon	$65.59
723006	Humboldt Nutrients Grow	5 Gallon	$116.99

Bloom contains a proprietary, trademarked, Phosphorus booster which improves plant photosynthesis, metabolism, genetics, and eventually crop quality and yield. Plant Growth, flowering, and fruiting depend on the correct balance of Phosphorus and Potassium.

Grow contains proprietary chelating agents that promote the availability and uptake of nutrients more efficiently than any competing three-part fertilizers. The diverse amount of chelating agents helps assure that none of the elements necessary for plant growth will fall out of solution and lock out.

HUMBOLDT HONEY HYDRO CARBS

Item No.	Description	Size	MSRP
723104	Honey Hydro Carbs	Quart	$12.89
723106	Honey Hydro Carbs	Gallon	$43.29
723108	Honey Hydro Carbs (SO)	2.5 Gallon	$93.59
723110	Honey Hydro Carbs (SO)	5 Gallon	$163.79

Humboldt Honey Hydro Carbs is an excellent source of carbohydrates. It promotes and facilitates the growth of beneficial bacteria and fungi in your soil or soil-less media, and dramatically enhances the quality of any plant's fruit.

Hydro Carbs are the fuel of the microscopic world, supplying the energy needed to drive biochemical systems. It breaks down into the smallest possible sugars when dissolved in water, creating an easily accessible food for beneficial fungus, bacteria, and plants. This increases your plants brix levels (a measure of the sugar content). A sweet, good taste and aroma are to be expected by doing this.

HUMBOLDT HONEY ORGANIC ES

Item No.	Description	Size	MSRP
723112	Honey Organic ES	Quart	$23.39
723114	Honey Organic ES	Gallon	$73.79
723116	Honey Organic ES	2.5 Gallon	$168.49
723118	Honey Organic ES	5 Gallon	$301.69

Humboldt Nutrients Humboldt Honey ES is a premium organic blend of cane molasses, yucca, quillaja, saponaria, amino acids, sea-plant extract, and bentonite, this carb source is one of a kind. The ES means Extra Strength. It increases brix levels by providing sugars to beneficial bacteria, fungi, and your plants.

By using our thick, premium Humboldt Honey ES in conjunction with our nutrient feeding schedules you not only enhance the quality, flavor, and quantity of your crop, but you maintain all the healthy microbial life present in the plants digestive system, the root zone and surrounding soil.

VERDE 16 - 1 - 2

Item No.	Description	Size	MSRP
723156	Verde	Quart	$22.49
723158	Verde	Gallon	$79.99
723160	Verde (SO)	2.5 Gallon	$189.99
723162	Verde (SO)	5 Gallon	$359.99

ORGANIC

It's Spanish for green. Lush, green colors and vigorous growth are what you can expect with Verde. Used as a foliar spray or a growth supplement for hydroponic or soil crops, Verde keeps plants healthy throughout their life cycle. Verde is a well balanced growth supplement with calcium, iron, magnesium, and other minor elements and vitamins. This is the perfect blend for plants during periods of accelerated growth. Accessible nitrogen is the key to a plant having a strong and vibrant internal structure. This organically derived growth supplement increases root, stem, and stalk structure, while boosting chlorophyll levels.

HUMBOLDT STICKY

Item No.	Description	Size	MSRP
724024	Humboldt Sticky	8 oz.	$11.10
724026	Humboldt Sticky	Pint	$18.50
724028	Humboldt Sticky	Quart	$30.00
724030	Humboldt Sticky	1/2 Gallon	$51.00

NEW!

Humboldt Sticky is a premium sticking and wetting agent which has been extensively tested in Northern California with phenomenal results.

Humboldt Sticky is formulated using premium ingredients which are simply unavailable in similar products.

High performance nutrients are expensive and no-one likes to see them go to waste. The state of the art binding agents present in Humboldt Sticky create a microscopic bond between your plant's leaves and your nutrient solution, using all-natural biochemical processes which do not damage plant tissue, nor induce plant stress. Humboldt Nutrients Humboldt Sticky helps all gardeners create large, aromatic crops infused with rich and luscious aromas, tastes and colors.

DEUCE DEUCE 0 - 0 - 22

Item No.	Description	Size	MSRP
723168	Deuce Deuce	Quart	$19.99
723170	Deuce Deuce	Gallon	$69.99
723172	Deuce Deuce	2.5 Gallon	$164.99
723174	Deuce Deuce	5 Gallon	$313.99

ORGANIC

Deuce Deuce is derived from sulfate of Potash, Pro-biotic Potassium, and Ascophyllum Nodosum. Potassium aids plants in enzymatic function, protein and cellulose formation, efficient photosynthesis, and rapid transportation of carbohydrates and starches throughout a plants vascular system. It will also harden flowers and improve resistance to disease and insects. Microorganisms are suspended in dormancy and become highly active. The biological life immediately begins breaking down the potassium and over 60 different elements provided by the high quality, cold pressed Ascophyllum Nodosum Seaweed.

FLAVORFUL

Item No.	Description	Size	MSRP
723076	FlavorFul	Quart	$17.59
723078	FlavorFul	Gallon	$58.49
723080	FlavorFul	2.5 Gallon	$134.59
723082	FlavorFul (SO)	5 Gallon	$233.99

ORGANIC

FlavorFul is comprised of long chains of organic carboxyl and polyhydroxide acids. Electrolytes are the key to healthy ion exchanges in plants and animals. FlavorFul contains electrolytes that stimulate and relax the plant cells, resulting in the smooth and consistent delivery of vitamins, minerals, nutrients, and trace elements in soil and fertilizers. FlavorFul lowers fertilizer costs due to more efficient uptake of nutrients, increase quality and quantity of yields, increased resistance to stress, as well as an excellent survival rate for all seedlings, grafts, transplants and cuttings.

HUMBOLDT NUTRIENTS MASTER A 4 - 0 - 3 & MASTER B 1 - 5 - 6

Item No.	Description	Size	MSRP
723024	Master A	Quart	$23.39
723026	Master A	Gallon	$70.19
723028	Master A	2.5 Gallon	$146.29
723030	Master A	5 Gallon	$257.39
723034	Master B	Quart	$23.39
723036	Master B	Gallon	$70.19
723038	Master B	2.5 Gallon	$146.29
723040	Master B	5 Gallon	$257.39

HUMBOLDT NUTRIENTS MASTER A & B is a premium two-part amino acid-based fertilizer program designed for flowering plants. The amino acids and organic acid complexes set the Master A & B series apart from your standard base nutrient by making all the macro and micro nutrients more available.

MAYAN MICROZYME

Item No.	Description	Size	MSRP
723140	Mayan MicroZyme	4 oz.	$19.99
723142	Mayan MicroZyme	8 oz.	$31.99
723144	Mayan MicroZyme	Pint	$44.99
723146	Mayan MicroZyme	Quart	$79.99
723148	Mayan MicroZyme	Gallon	$249.99

ORGANIC

Mayan MicroZyme is a 100% organic and ecologically safe bacterial-enzymatic complex with 24 species of soil microorganisms that increases fertility while providing vital nutrients to all types of plants and crops. Mayan MicroZyme mineralizes nutrients; produces nitrogen, natural antibiotics and plant growth hormones; regulates nitrogen; builds soil organic matter; suppresses soil and plant pathogens; and improves fertility, yields, and nutrient availability and uptake.

HUMBOLDT PROZYME

Item No.	Description	Size	MSRP
723096	Humboldt Prozyme	Quart	$39.99
723098	Humboldt Prozyme	Gallon	$139.99
723100	Humboldt Prozyme	2.5 Gallon	$339.99
723102	Humboldt Prozyme	5 Gallon	$659.99

ORGANIC

Enzymes are biological catalysts, derived from living organisms. Catalysts increase the speed of naturally occurring chemical reactions. Prozyme, is a concentrate, made up of over 80 different beneficial enzymes. These enzymes will break down dead root mass, starches, carbohydrates and nutrients to make them readily available to the plant. Prozyme is a natural chelate, or a biological key, carrying the elements necessary for plant health, and delivering them into the cell wall for maximum absorption. It allows the plant to absorb and immediately use the nutrients.

MYCO MADNESS SOLUBLE

Item No.	Description	Size	MSRP
723126	MycoMadness Soluble	4 oz.	$25.99
723128	MycoMadness Soluble	8 oz.	$49.99
723130	MycoMadness Soluble	1 lb	$89.99
723132	MycoMadness Soluble	5 lb	$399.99

ORGANIC

Myco Madness contains a bio-stimulant package, 18 mycorrhizal species, 19 beneficial bacteria and 2 trichoderma species well-suited to a variety of media, soil conditions, climates, and plants. It contains mycorrhizal fungi that colonize plant roots and extend the root system into the surrounding media, greatly enhancing the absorptive surface area of root systems. Myco Madness helps link the plant roots, organic matter, and fertilizers of all types. It includes a natural root biostimulant. Myco Madness helps plants enjoy improved nutrient and water uptake.

MYCO MAXIMUM GRANULAR

Item No.	Description	Size	MSRP
723134	MycoMaximum Granular	8 oz.	$29.99
723136	MycoMaximum Granular	1 lb	$49.99
723138	MycoMaximum Granular	5 lb	$199.99

ORGANIC

Myco Maximum granular contains humic acids, organic fertilizer, 10 species of growth-enhancing mycorrhizal fungi, 19 strains of beneficial bacteria, 2 Trichoderma species, micronutrients, 11 time-released carbohydrates, and 20 different amino acids. It adds organic matter and contains nitrogen, phosphorous, potassium, and micronutrients necessary for plant health. Mycorrhizal fungi increase the surface-absorbing area of the roots. Working together, beneficial bacteria, mycorrhizae, and Trichoderma fungi expand into the surrounding medium to greatly increase the roots' ability to absorb and recycle water and nutrients, improving transplant success, flowering, and plant health.

HUM-BOLT HUMIC

Item No.	Description	Size	MSRP
723086	Hum-Bolt Humic	Quart	$17.59
723088	Hum-Bolt Humic	Gallon	$58.49
723090	Hum-Bolt Humic (SO)	2.5 Gallon	$134.59
723092	Hum-Bolt Humic (SO)	5 Gallon	$233.99

ORGANIC

HUM-BOLT is a 8% Humic Acid which promotes high ion exchange capabilities, stimulates plant enzymes, increases beneficial organisms and acts as an organic catalyst. HUM-BOLT is a long-chain molecule which plays many roles in living organisms, it is a free radical scavenger, binding up free electrons, as well as heavy metals which can negatively affect proper cell replication. HUM-BOLT is a natural chelate and biostimulant. It creates immunities for plants, by blocking viral and bacterial particles from attaching to cell walls. HUM-BOLT creates more permeable cell walls, allowing for better absorption of nutrients, while protecting the plants by strengthening the cells natural defenses.

SEA CAL 2 - 0 - 0

Item No.	Description	Size	MSRP
723060	Sea Cal	Quart	$33.99
723062	Sea Cal	Gallon	$129.99
723064	Sea Cal	2.5 Gallon	$314.99
723066	Sea Cal (SO)	5 Gallon	$599.99

Sea Cal is a highly concentrated growth enhancer and chelated calcium supplement that offers vital macro and micro nutrients in specific ratios during early plant development. Calcium is very important during a plants vegetative cycle, controlling aspects of cell wall structure and permeability. Calcium is absorbed into a plant through the root tips, but plants are not always able to completely satisfy their need for calcium through their roots. This is why Sea Cal makes an excellent foliar spray.

SEA MAG 1 - 3 - 4

Item No.	Description	Size	MSRP
723068	Sea Mag	Quart	$23.99
723070	Sea Mag	Gallon	$79.99
723072	Sea Mag	2.5 Gallon	$189.99
723074	Sea Mag (SO)	5 Gallon	$359.99

Sea Mag may be utilized for any type of vegetable, flower, or herbs. Sea Mag is loaded with vital micro nutrients, plant hormones, and B-vitamins. Plant hormones control cell division, cell growth, cell differentiation, and various internal processes. Cytokynins and auxins are provided by sea plant extracts and organic acid complexes. Sea Mag can be used to supplement chelated magnesium, copper, and boron which plants require. Sea Mag prevents and corrects any potential deficiencies. Sea Mag has been formulated to have the correct nutrient ratios that plants require at specific times during their growing and flowering cycles.

BIG UP POWDER 0 - 33 - 23

Item No.	Description	Size	MSRP
723150	Big Up Powder	8 oz.	$29.99
723152	Big Up Powder	1 lb	$49.99
723154	Big Up Powder	5 lb	$199.99
723155	Big Up Powder	10 lb	$379.99

Big Up Powder is a premium amino chelated bloom booster. It is free of all of the unnecessary artificial colors and dyes. Big Up has over 24 different amino acids that efficiently deliver high levels of phosphorus and potassium to the fruit or flower.

Plants are in a transitional phase during this first week. By introducing Big Up powder in the first week of flowering, you effectively flip the switch in your plant, sending it immediately into an intense flowering cycle. Big Up also provides the final boost of energy that your plants need to finish the bloom cycle with the largest flowers you have ever seen.

HUMBOLDT NUTRIENTS ONENESS 5 - 9 - 4

Item No.	Description	Size	MSRP
723178	Oneness	Quart	$23.99
723180	Oneness	Gallon	$84.99
723182	Oneness (SO)	2.5 Gallon	$194.99
723184	Oneness	5 Gallon	$364.99

Humboldt Nutrients team of agronomists and chemists have created the first naturally chelated One-part formula on the market. Oneness is the most advanced one part nutrient on the market. It is the perfect solution for the beginning gardener, looking for experienced results. Oneness is formulated with over 30 different natural chelates. Oneness contains a unique proprietary combination of plant-based amino acids, organic acids and complex carbohydrates, setting it apart from the competing synthetically chelated one-part formulas.

HUMBOLDT NUTRIENTS GINORMOUS 0 - 18 - 16

Item No.	Description	Size	MSRP
723186	Ginormous	Quart	$29.99
723188	Ginormous	Gallon	$99.99
723190	Ginormous	2.5 Gallon	$219.99
723192	Ginormous (SO)	5 Gallon	$409.99

Humboldt Nutrients has created the most powerful super-bloom booster on the market. It is designed to make even the most demanding gardeners ecstatic at harvest time. Ginormous is the perfect solution for the gardener looking to maximize crop yield and quality. Your vegetables and fruits will be larger, even gigantic or Ginormous with this additive. Ginormous is the most advanced super-bloom booster on the market, designed to make even the most demanding gardeners ecstatic at harvest time.

Maxicrop®

MAXICROP® ORIGINAL SOLUBLE POWDER 1.0 - 0.0 - 4.0

Item No.	Description	Size	MSRP
718595	Maxicrop® Original Soluble Powder	10.7 oz.	$15.75
718597	Maxicrop® Original Soluble Powder (SO)	10 lb	$149.95

OMRI™ Listed

ORGANIC

- For trees, flowers, lawns, fruits and vegetables.
- Natural product made from fresh Atlantic kelp.
- Can be used for cuttings and rootings, outdoor plants, foliar feed, lawns, compost enhancer.

MAXICROP® ORIGINAL 0.1 - 0 - 1

Item No.	Description	Size	MSRP
718600	Maxicrop® - Original	Quart	$8.95
718605	Maxicrop® - Original	Gallon	$20.25
718592	Maxicrop® - Original (SO)	2.5 Gallon	$45.75

ORGANIC

- For trees, flowers, lawns, fruits and vegetables.
- Can be used for soaking seeds and bulbs before planting, ideal for houseplants, ideal for seedlings and cuttings.
- Derived from seaweed.

MAXICROP® PLUS IRON 0.1 - 0.0 - 1.0

Item No.	Description	Size	MSRP
718610	Maxicrop® Plus Iron	Quart	$9.50
718615	Maxicrop® Plus Iron	Gallon	$22.15

ORGANIC

- For acid loving indoor and outdoor plants.
- Made from seaweed harvested from the perfect environments of the mineral rich waters of the Norwegian coastline.

MAXICROP® LIQUID FISH 5.0 - 1.0 - 1.0

Item No.	Description	Size	MSRP
718620	Maxicrop® Liquid Fish	Quart	$7.75
718625	Maxicrop® Liquid Fish	Gallon	$17.25

ORGANIC

- For trees, flowers, lawns, fruits and vegetables.
- Natural product made from fresh Atlantic fish.
- Can be used for cuttings and rootings, outdoor plants, foliar feed, lawns, compost enhancer.

SUNLEAVES INTERNATIONAL HOUSE OF GUANO

Item No.	Description	MSRP
721060	International House of Guano	$27.95

ORGANIC

The Sunleaves International House of Guano Kit provides plants with the perfect level of nutrients through every stage of development. This organic fertilizing kit includes 2.2 pound of the great all-purpose Peruvian Seabird Guano, 1 pound of high-nitrogen Mexican Bat Guano, 2.2 pounds of high-phosphorus, low-nitrgen Jamaican Bat Guano, and 2.2 pounds of high-phosphorus Indonesian Bat Guano. This is a comprehensive plant nutrition program complete with an easy-to-understand feeding schedule for flowering and non-blooming plants, indoors and out.

SUNLEAVES INDONESIAN BAT GUANO 0.5 - 12 - 0.2

Item No.	Description	Size	MSRP
721000	Indonesian Bat Guano	2.2 lb	$7.95
721005	Indonesian Bat Guano	11 lb	$24.95
721010	Indonesian Bat Guano (While supplies last)	50 lb	$86.95
721009	Indonesian Bat Guano	44 lb	$85.95

ORGANIC

From the Far East comes Sunleaves Indonesian Bat Guano. With the highest phosphorus rating available in a guano, it is an excellent addition to your guano line. Perfect for encouraging multiple blooms and hardy root growth. 100% organic, suitable for all indoor and outdoor plants. May be used in watering program or applied dry.

SUNLEAVES JAMAICAN BAT GUANO 1 - 10 - 0.2

Item No.	Description	Size	MSRP
721015	Jamaican Bat Guano	2.2 lb	$7.95
721020	Jamaican Bat Guano	11 lb	$31.95
721024	Jamaican Bat Guano	40 lb	$130.95

OMRI™ Listed

ORGANIC

Nothing is better for blooming flowers or ripening fruits than pure, high-phosphorus Sunleaves Jamaican Bat Guano. Jamaican Bat Guano is most effectively used at the root zone to heighten root and flower development. Gardeners can amend their soil with it, us it as a top dressing or create a "guano tea" and apply it directly to plant roots in a fortified water dilution. Eco-friendly harvesting from centuries-old cave deposits.

SUNLEAVES MEXICAN BAT GUANO 10 - 2 - 1

Item No.	Description	Size	MSRP
721030	Mexican Bat Guano	1 lb	$6.95
721035	Mexican Bat Guano	5 lb	$27.95
721040	Mexican Bat Guano (While supplies last)	20 lb	$99.95
721039	Mexican Bat Guano	14 lb	$64.95

ORGANIC OMRI Listed

Pure bat guano has been used for centuries as a plant food of the highest quality. An excellent source of nitrogen and trace elements all vegetative crops need, Sunleaves Mexican Bat Guano substantially boosts leaf growth and overall plant vigor.

SUNLEAVES PERUVIAN SEABIRD GUANO 10 - 10 - 2

Item No.	Description	Size	MSRP
721045	Peruvian Seabird Guano	2.2 lb	$7.95
721050	Peruvian Seabird Guano	11 lb	$24.95
721055	Peruvian Seabird Guano (While supplies last)	55 lb	$105.95
721054	Peruvian Seabird Guano	40 lb	$79.95

ORGANIC OMRI Listed

With absolutely no chemical additives, Sunleaves Peruvian Seabird Guano offers the highest quality in organic fertilization and is even OMRI listed. Peruvian Seabird Guano is pelletized for water solubility with less mess. There is nothing like it for accelerating growth - growers can use Peruvian Seabird Guano indoors and out on houseplants, vegetables, ornamentals and fruit trees.

ROCKWOOL FORMULA ONE A 5 - 0 - 4 & B 1 - 5 - 5

Item No.	Description	Size	MSRP
719600	Formula One A	Quart	$13.29
719605	Formula One B	Quart	$13.29
719610	Formula One A	Gallon	$31.00
719615	Formula One B	Gallon	$31.00
719620	Formula One A	2.5 Gallon	$69.49
719625	Formula One B	2.5 Gallon	$69.49

Sunleaves Rockwool Formula One is specially formulated to counteract the alkaline nature of rockwool. Nutrient is naturally pH buffered and more stable for the entire life of the nutrient solution. Rockwool Formula One is well-suited to both vegetative and flowering stages. Easy-to-understand mixing instructions are included.

SUPERthrive

SUPERTHRIVE®

Item No.	Description	Size	MSRP
732810	SUPERthrive®	2 oz.	$7.29
732815	SUPERthrive®	4 oz.	$11.49
732820	SUPERthrive®	Pint	$36.95
732823	SUPERthrive®	Quart	$64.95
732825	SUPERthrive®	Gallon	$183.95

SUPERthrive® Add to fertilizer for growth! Unique normalizing vitamins - hormones (50). SUPERthrive® World Champion activator, reviver, transplanter and grower. Super Concentrated! 1 Tbsp per 15 Gallons!

- Great for everything green... indoor/outdoor plants, seedlings, bulbs, trees, lawns, seeds, etc.
- NON-Pesticide, NON-Polluting - 50 instant biousables normal pure complexes. Not registered in OR at the time of this catalog printing.

Spray-N-Grow

SPRAY-N-GROW

Item No.	Description	Size	MSRP
719050	Spray-N-Grow	8 oz.	$12.95

ORGANIC

Spray-N-Grow is not a fertilizer, hormone or nutrient solution. It is a micronutrient complex made of naturally occurring elements that are essential for plant growth. Spray-N-Grow provides your plants with essential micronutrients not provided by your nutrient solution.

- Non-chemical, natural formula - safe for people, plants, pet and the environment.
- Easy to use - simply spray plants for results.
- Produces amazing results on ALL plants.
- Higher vitamin and mineral content.
- Increased root mass.
- Increased size by weight and diameter.
- Increased yield.
- Earlier blooming and harvest.

COCO-WET

Item No.	Description	Size	MSRP
732000	Coco-Wet	8 oz.	$6.95

ORGANIC

Coco-Wet is an organic wetting agent formulated to maximize product absorption and coverage on all plant surfaces. Coco-Wet lowers the surface tension between plant leaves and the products being sprayed on them. This enables plants to get maximum absorption of everything that is sprayed on them. No more run-off, repelling effect or evaporation. The benefits of Coco-Wet:

- Maximum product absorption and coverage on all plant surfaces.
- Reduced product evaporation.
- Produces amazing results on ALL plants.
- Minimized run-off and repelling effect.
- Non-chemical, natural formula - safe for people, plants, pets and the environment.
- Easy to use – simply mix with all your foliar sprays.

ORCHID CHAMPION

Item No.	Description	Size	MSRP
719052	Orchid Champion	500 ml	$21.95
719053	Orchid Champion	1 Liter	$36.95
719054	Orchid Champion (SO)	4 Liter	$134.95

ORGANIC OMRI Listed

Orchid champion - is a media treatment which aids in the cleansing and expulsion of dead matter. It should be used with all watering procedures and is compatible with all fertilization programs and H202. Experts agree that clean systems may help avert the development of root disease, a leading contributor of orchid illness. Clean systems foster healthy plants with low stress. Try the "Champion's Secret" - Orchid Champion.

HYGROZYME™

Item No.	Description	Size	MSRP
718975	Hygrozyme™	500 ml	$21.95
718980	Hygrozyme™	1 Liter	$36.99
718985	Hygrozyme™	4 Liter	$136.95
718990	Hygrozyme™	10 Liter	$323.95
718995	Hygrozyme™	20 Liter	$609.95

Hygrozyme™ is a true breakthrough in enzyme based products that breaks down old root mass to allow for and stimulate new growth. Manufactured in an entirely unique way, Hygrozyme™ offers growers a number of advantages over competing products. It is bacteria free meaning that it has a virtually unlimited shelf life and there is absolutely no risk of introducing living bacteria into your system. The other benefit that this provides is that because there are no bacteria.

PLANT SUCCESS GREAT WHITE MYCORRHIZAE

Item No.	Description	Size	MSRP
720310	Great White Mycorrhizae	4 oz.	$36.95
720315	Great White Mycorrhizae	8 oz.	$65.95
720320	Great White Mycorrhizae	32 oz.	$223.95

Great White is the most advance mycorrhizal product on the market today. The combination of mycorrhizae, beneficial bacteria, trichoderma, and plant vitamins will give your plants a strong and developed root system. This will enable your plants to break down and absorb nutrients efficiently and effectively. Also it will increase water uptake and the overall absorption area of the root system, resulting in a healthier plant. Can be used in hydroponics as well as soil. May also be injected in to media.

PLANT SUCCESS SOLUBLE MYCORRHIZAE

Item No.	Description	Size	MSRP
720300	Soluble Mycorrhizae	4 oz.	$22.95

Plant Success Soluble is a soil drench for porous soil and contains 13 carefully selected mycorrhizal fungi, 2 tricoderma species and 17 bacterial species well-suited to a variety of soils, climates and plants. Plant Success Soluble contains mycorrhizal fungi that colonize plant roots and extend the root system into the surrounding soil greatly enhancing the absorptive surface area of root systems, forming an essential link between plant and soil, producing seedlings of the highest quality. Also included is specially formulated natural root biostimulant. The plant enjoys improved nutrient and water uptake, and superior field performance.

PLANT SUCCESS GRANULAR 3 - 1 - 2

Item No.	Description	Size	MSRP
720305	Plant Success Granular Mycorrhizae	1 lb.	$23.95

Plant Success Granular - mycorrhizal granular inoculum consists of 10 carefully selected species of endomycorrhizae, ectomycorrhizae and tricoderma fungal species. A high quality biostimulant package containing kelp meal, humus, vitamins and amino acids is also added to improve mycorrhizal germination and effectiveness. Working together, beneficial mycorrhizal and tricoderma fungi expand into the surrounding soil and greatly increase the root's ability to absorb water, nutrients, improve yields and plant health.

WHAT IS MYCORRHIZAE ANYWAY?

A favorite research topic for the last decade has been the symbiosis between a plant root and beneficial fungus, called mycorrhizae. Mycorrhizae is the name of a widespread symbiotic (mutually beneficial) root relationship. The fungus helps the plant extract nutrients from the soil, and the plant repays the "kindness" with sugars produced by photosynthesis.

The "plant – mycorrhizae" team is perhaps nature's most successful long-term relationship. It allowed plants to move from their aquatic origins, over 460 million years ago, to the land, where they proliferate today. Mycorrhizae (myco-rise'-ee, plural form) expand plant roots, typically from 100– 1,000 fold, and can amplify nutrient and water extraction from rock itself! Who says you can't squeeze water from a rock - mycorrhizae can! And nutrients too!

The relationship is such a winner that over 90% of the world's plants form mycorrhizae in their native habitats. It is a big reason plants thrive in their native habitats without fertilizer, irrigation and pesticides. Now organic and hydroponic growers can benefit from this relationship by using National Garden Wholesale's mycorrhizal inoculants.

What are the benefits?

What does the mycorrhizal symbiosis do for the plant? One thing for sure is that mycorrhizal plants are far better than non-mycorrhizal plants at mining nutrients from the soil. The obvious result of better nutrition is better plant growth and improved yields. There are hundreds of published examples showing mycorrhizal plants growing significantly larger than non-mycorrhizal controls.

This "growth response" is only the most obvious benefit. Other benefits, while appearing unrelated to nutrition, may be caused by the improvement in phosphorus uptake. For example, plants with plenty of phosphorus are more resistant to water stress than plants low on phosphorus. Thus mycorrhizal plants have better tolerance of drought.

Many plant species are highly dependent upon mycorrhizae and thus have been difficult to work with in soilless and artificial growing media. This is primarily due to the lack of beneficial soil organisms in sterile media.

Intentional introduction of the missing beneficial microorganisms using National Garden Wholesale's mycorrhizal inoculants invariably makes the plant species easier to grow and leads to improved rooting and growth rate. Other benefits, not apparently growth related, include the ability of mycorrhizal fungi to actively promote healthier roots and improve the plant's tolerance for salts.

By Mike Amaranthus Ph.D for National Garden Wholesale®

All the Earth Juice™ formulas are derived from entirely natural sources. Formulated for vegetables, ornamentals, shrubs, trees and lawns. Designed for soil and soilless medias, indoor or outdoor use. No hidden NPK boosting synthetics. No artificial additives, colors, or vitamins. No added chlorine or formaldehyde.

EARTH JUICE® GROW™ 2 -1 - 1 & BLOOM™ 0 - 3 - 1

Item No.	Description	Size	MSRP
718655	Earth Juice® Grow™	Quart	$12.96
718660	Earth Juice® Grow™	Gallon	$29.96
718680	Earth Juice® Bloom™	Quart	$12.96
718685	Earth Juice® Bloom™	Gallon	$29.96

A natural liquid fertilizer that is formulated to encourage robust vegetative growth for a variety of indoor/outdoor foliage and flowering plants. Non-burning and no salt residue. Earth Juice Grow and Bloom formulas may be mixed and used together. Best used for Hand-Feeding applications.

A natural liquid fertilizer formulated for indoor/outdoor blooming plants to assist in the rich development and production of flowers, fruit and vegetables. Use at first sign of budding and throughout the flowering/production period. May be used for plants that do not require any nitrogen, such as cactus and legumes. Earth Juice Grow and Bloom formulas may be mixed and used together. Best used for hand-feeding applications.

EARTH JUICE® CATALYST® 0.03 - 0.01 - 0.10 & META-K™ 0 - 0 - 10

Item No.	Description	Size	MSRP
718705	Earth Juice® Catalyst®	Quart	$12.96
718710	Earth Juice® Catalyst®	Gallon	$29.96
732835	Earth Juice® Meta-K™	Quart	$12.15
732840	Earth Juice® Meta-K™	Gallon	$28.11

A natural molasses-kelp based liquid nutrient that aids plant growth and production. To be used as part of a complete fertilization program through all stages of plant development. Also functions as an excellent "finishing" formula for determinate plants. May be used solely or in conjunction with all soil and hydroponic fertilizers. Highly recommended. For indoor/outdoor plants, soil and hydroponics.

A natural liquid potassium formulation for potassium deficient plants and those plants that require increased potassium. Recommended to apply prior to and during flowering/fruiting to aid the plant's ability to support production, increase drought resistance, and to maximize nutrient assimilation. May be used together with Earth Juice Grow or Bloom and a variety of other fertilizers. For indoor/outdoor plants, soil and hydroponics.

EARTH JUICE® MICROBLAST™

Item No.	Description	Size	MSRP
732855	Earth Juice® Microblast™	Quart	$15.12
732860	Earth Juice® Microblast™	Gallon	$34.78

A proprietary liquid micronutrient formula designed to be used to prevent and/or correct micronutrient deficiencies. For use with Earth Juice Grow and Bloom "Original Formulas" as well as a variety of other liquid and dry soil and hydroponic fertilizers. May be added to nutrient solution reservoirs, watered in or used as a foliage spray. For indoor/outdoor plants, soil and hydroponics.

EARTH JUICE® HI-BRIX™ MOLASSES FOR YOUR PLANTS 0 - 0 - 3

Item No.	Description	Size	MSRP
720444	Earth Juice® Hi-Brix™	Pint	$7.60
720446	Earth Juice® Hi-Brix™	Gallon	$14.95
720448	Earth Juice® Hi-Brix™	2.5 Gal	$32.00

This rare and highly prized molasses is a natural source of carbohydrates (sugars) and plant nutrients that has been specially tailored into liquid formulation for indoor and outdoor plants in soil and hydroponics. It can be used in conjunction with a variety of fertilizers and highly recommended for the brewing of plant teas.

ROOTERS™ MYCORRHIZAE ENDO/ECTO BLEND

Item No.	Description	Size	MSRP
720325	Rooters™ Mycorrhizae Super Pack	1 lb	$12.34

Can be used with any soil or media to enhance organic fertilizers. This special granular form, mycorrhizal blend can absorb organic forms of nutrients and promote green leaf growth, fruit and flower production while increasing drought and insect resistance. Mycorrhizae fungus have been called the orchestrators of the root zone as they create a network around fine feeder roots that absorb nutrients and minerals. Effective for 95% of all plant species and the widest variety of soil and plant uses.

EARTH JUICE® PRIMAL HARVEST™ 0 - 12 - 1

Item No.	Description	Size	MSRP
720220	Primal Harvest™ (While supplies last)	4 lb bag	$9.29
720225	Primal Harvest™	20 lb bag	$31.76
720222	Primal Harvest™ NEW!	5 lb bag	$14.67

This legendary "king" of bloom guanos, through eons of aging, has been naturally processed into a zero nitrogen and high phosphorous fertilizer that will aid in focusing the plant's energy on the production of flowers, fruit, and vegetables and not on green-leafy growth. To experience awesome yields, feed your plants the legendary Primal Harvest. For indoor/outdoor plants.

EARTH JUICE® BAT GUANO GROW™ 10 - 2 - 1

Item No.	Description	Size	MSRP
720265	Bat Guano Grow™ (While supplies last)	1.5 lb bag	$9.95
720270	Bat Guano Grow™ (While supplies last)	4.5 lb bag	$22.49
720263	Bat Guano Grow™ NEW!	.75 lb bag	$5.93
720267	Bat Guano Grow™ NEW!	3 lb bag	$14.31

A tried and true fertilizer that has demonstrated to be a superior performing vegetative fertilizer. Very light flowing and mixes easily with most growing media. Bat Guano Grow is the highest quality high-desert guano available. For indoor/outdoor plants.

EARTH JUICE® RAINBOW MIX GROW™ 5 - 5 - 2

Item No.	Description	Size	MSRP
720280	Rainbow Mix Grow™ (While supplies last)	3 lb bag	$9.96
720285	Rainbow Mix Grow™ (While supplies last)	15 lb bag	$36.76
720282	Rainbow Mix Grow™ NEW!	5 lb bag	$17.99
720286	Rainbow Mix Grow™ NEW!	20 lb bag	$54.03

ORGANIC

A fined-tuned dry-blend of natural-organic nutrients with multiple strains of beneficial Mycorrhizae plus Humic Acid, all professionally formulated for vigorous vegetative growth for a variety of indoor/outdoor plants. For container plants, apply every 3-4 months. For determinate plants, a single application is the general recommendation. May be used as a premix or applied as a top-dressing Rainbow Mix Grow and Bloom may be used together.

EARTH JUICE® RAINBOW MIX BLOOM™ 1 - 9 - 2

Item No.	Description	Size	MSRP
720290	Rainbow Mix Bloom™ (While supplies last)	3 lb bag	$9.96
720295	Rainbow Mix Bloom™ (While supplies last)	15 lb bag	$36.76
720292	Rainbow Mix Bloom™ NEW!	5 lb bag	$17.99
720296	Rainbow Mix Bloom™ NEW!	20 lb bag	$54.03

ORGANIC

A fined-tuned dry-blend of natural-organic ingredients with multiple strains of beneficial Mycorrhizae plus Humic Acid, all professionally formulated to encourage a profusion of flowers and abundant yields of fruit and vegetables for variety indoor/outdoor plants. Apply just prior to and during budding and flowering. Re-apply every 3-4 months. For determinate plants, a single application is the general recommendation. May be used as a premix or applied as a top-dressing Rainbow Mix Grow and Bloom may be used together.

THE GUANO COMPANY

BUDSWEL DRY

Item No.	Description	Size	MSRP
720025	Budswel DRY 0 - 7 - 0	2 lb bag	$22.95
720028	Budswel DRY - Florida 0 - .7 - 0	2 lb bag	$22.95
720030	Budswel DRY 0 - 7 - 0	12 lb box	$114.95
720032	Budswel DRY - Florida 0 - .7 - 0	12 lb box	$114.95

For fruiting and flowering plants. Easy to use! Just mix with water and broadcast lightly around roses, or in flower beds. Contains earthworm castings, bat and seabird guano.

ORGANIC

BUDSWEL LIQUID

Item No.	Description	Size	MSRP
720035	Budswel LIQUID .01 - .10 - .01	Gallon	$35.95
720036	Budswel LIQUID .01 - .10 - .01	5 Gallon	$155.95
720055	Budswel LIQUID - Florida .50 - .50 - .50	Gallon	$35.95
720066	Budswel LIQUID - Florida .50 - .50 - .50	5 Gallon	$155.95

For fruiting and flowering plants. Easy to use! Just mix with water and broadcast lightly around roses, or in flower beds. Contains earthworm castings, bat and seabird guano.

ORGANIC

SUPER TEA MIX

Item No.	Description	Size	MSRP
720040	Super Tea DRY 5 - 5 - 1	2 lb bag	$22.95
720050	Super Tea LIQUID .05 - .10 - .02	Gallon	$33.95

Promotes general health and growth of houseplants and garden vegetables. This formula is ideal for seedlings - won't burn! Contains earthworm castings, bat and seabird guano.

ORGANIC

AmHydro

SUPER CHARGER™

Item No.	Description	Size	MSRP
732950	Super Charger™ - 12 capsules	.35 oz.	$15.95

Super Charger™ is a vitamin packed supplement consisting of a complex amalgam of vitamins (A, B-complex, C, E), antioxidants, peptides, and trace minerals (selenium, zinc). The ingredients present within Super Charger™ aid in the production of ATP, a form of plant energy. Many ingredients within Super Charger™ act as co-enzymes, essential to the activation of many vital plant enzymes, having a positive effect on overall plant metabolism. Super Charger™ maximizes the effect of your favorite enzyme products. Super Charger™ also aids in guarding against the effects of environmental damage, resulting in more vigorous growth. Super Charger™ is a must for plants growing in extreme conditions!

DARK ENERGY™ 2 - 0 - 0

Item No.	Description	Size	MSRP
732410	Dark Energy™	Pint	$26.95
732415	Dark Energy™	Quart	$42.95
732420	Dark Energy™	Gallon	$139.95

Dark Energy™ is a select blend of L-amino acids, specifically chosen for each of their beneficial effects on plant growth. L-amino acids improve the absorption rate of your favorite fertilizers by chelating essential nutrients and making them more available to your plants. Dark Energy™ enhances the bloom stage of any plant by stimulating the natural production of ethylene, a flowering and ripening hormone. Trials have shown that an increase in ethylene concentration results in a reduced time to harvest and synchronized, even ripening. You will notice an increase in overall biomass and harvest quality through continued use of Dark Energy™.

SUPERNOVA™ NUTRIENT ADDITIVE 1 - 1 - 1

Item No.	Description	Size	MSRP
732545	Supernova™	Pint	$24.95
732550	Supernova™	Quart	$39.95

SuperNova™ is an Ascophyllum nodosum based nutrient additive, containing a wide range of macro and micro-nutrients, carbohydrates, amino acids, and vitamins. SuperNova™ has a high concentration of the plant hormone cytokinin, which promotes cell division, lateral growth, and stimulates chlorophyll synthesis. Cytokinin will cause the release of lateral buds from apical dominance, promoting bushier plants with an increase in flowering sites. SuperNova™ also contains specialized amino acids, betaines, which make plants more tolerant to high nutrient levels and drought. The wetting agent in SuperNova™ makes it perfect for use as a foliar spray! Recommended to use with DARK ENERGY™.

SNOW STORM ULTRA 0 - 0 - 3

Item No.	Description	Size	MSRP
719942	Snow Storm Ultra	8 oz.	$10.95
719944	Snow Storm Ultra	Quart	$29.95
719946	Snow Storm Ultra	Gallon	$89.95
719948	Snow Storm Ultra (SO)	2.5 Gal	$179.95

If you like Purple Maxx/Snow Storm, but color is not your primary goal, then Snow Storm Ultra is for you. We isolated the "snow storm" effect and optimized it for maximum results. Absolutely nothing else like it on the market. Does not contain carbohydrates or molasses. Three years of development went into this Humboldt County original. Best of all, this additive works with all your favorite nutrient lines. When used with Gravity, Snow Storm will take your plants beyond anything achievable with fertilizer alone.

PURPLE MAXX

Item No.	Description	Size	MSRP
719905	Purple Maxx	8 oz.	$29.95
719910	Purple Maxx	Quart	$84.95
719915	Purple Maxx	Gallon	$249.95

ORGANIC

No dyes, no tricks, 100% organic! Works well in soil or hydro, indoors or out. Purple Maxx is a combination of organic compounds that not only encourage plants to "stack" their flowering sites closer together during early flower development, but also stimulate increased development later.

GRAVITY 0 - 2 - 0

Item No.	Description	Size	MSRP
719965	Gravity	8 oz.	$26.95
719970	Gravity	Quart	$49.95
719975	Gravity	Gallon	$149.95

Our uniquely prepared kelp extract and phosphorus based additive will harden your flowers from the top to the bottom. A little goes a long way. Use once or twice about 3 weeks before the end of a plants cycle. Adds size and weight to flowering plants.

BUSHMASTER

Item No.	Description	Size	MSRP
719980	Bushmaster	4 oz.	$19.95
719985	Bushmaster	8 oz.	$34.95
719990	Bushmaster	Quart	$99.95
719995	Bushmaster	Gallon	$299.00

Our proprietary recipe will speed up the transition to bloom while decreasing internode spacing resulting in tighter flower clusters and bushier compact plants. Works well in soil, hydro or as a foliar. A must have for omega gardeners or vertical growing systems.

DYNA-GRO™
The Nutrition Solution®

DYNA-GRO™ LIQUID GROW™ 7 - 9 - 5 & LIQUID BLOOM™ 3 - 12 - 6

Item No.	Description	Size	MSRP
719000	Liquid Grow™	Quart	$19.00
719005	Liquid Grow™	Gallon	$56.00
719007	Liquid Grow™ (SO)	5 Gallon	$275.00
719010	Liquid Bloom™	Quart	$19.00
719015	Liquid Bloom™	Gallon	$56.00
719017	Liquid Bloom™ (SO)	5 Gallon	$275.00

Liquid Grow™ is an all purpose complete nutrition formula used to promote both foliage and blooms. Ideal for poor, rocky soils, container grown plants and hydroponics. Excellent as a rapid cure for nutrient deficiencies. If you are looking for a single formula to use all of the time on all of your plants, this is the one.

Liquid Bloom™ is a low nitrogen, high phosphorus complete nutrition formula specifically formulated to encourage the development of large vibrant blooms. It is ideal for roses, orchids, African violets and all other flowering plants. Liquid Bloom™ supplies a high ratio of nitrate to ammoniacal nitrogen needed to avoid stem elongation in flowering plants and vegetables. Apply Liquid Bloom™ before flower buds appear to help initiate flowering.

DYNA-GRO™ PRO-TEKT® 0 - 0 - 3

Item No.	Description	Size	MSRP
719025	Pro-Tekt®	Quart	$14.50
719030	Pro-Tekt®	Gallon	$37.00

Pro-Tekt® The Silicon Solution® a silicon supplement, supplies higher levels of potassium and silicon to build stronger plant cell walls, providing a Pro-Tekt-ive barrier against piercing-sucking insects and invading fungi. Pro-Tekt® reduces disease and insect problems, increase stem strength and leaf positioning, which improves photosynthesis. It also increases heat, drought and cold tolerance. Use as a supplement with any fertilizer to provide non-toxic preventative protection against fungal infections and insect infestations. Recommended for all plants.

AZAMAX™

Item No.	Description	Size	MSRP
724464	AzaMax™	4 oz.	$19.98
724470	AzaMax™	Pint	$69.98
724475	AzaMax™	Quart	$118.95
724477	AzaMax™	Gallon	$365.95

OMRI Listed ORGANIC

AzaMax™ is a natural product with a broad spectrum of pest control and broad plant applications. It contains Azadirachtin A&B as active ingredients and more than 100 limonoids from it's special technology. The special feature of AzaMax™ is that it does not use hard chemical solvents and fully uses food grade formulation ingredients.

AzaMax™ is an antifeedant and insect growth regulator which controls pests through starvation and growth disruption. It effectively controls spider mites, thrips, fungus gnats, aphids, whiteflies, leaf miners, worms, beetles, leafhoppers, scales, mealy bugs, nematodes and other soil borne pests. Mix one tablespoon to one gallon. EPA Reg. No. 71908-1-81268.

SUCRASHIELD

Item No.	Description	Size	MSRP
704700	SucraShield	Pint	$24.95
704705	SucraShield	Gallon	$149.95

OMRI Listed ORGANIC

SucraShield sugar-based Insecticide/Miticide/Ovicide provides fast and sure biochemical control on a wide range of soft-bodied problem pests in the greenhouse and nursery as well as fruits, nuts, mushrooms and vegetables. Based on natural sugar esters, its unique mode of action creates holes in the target pest, causing rapid death from dessication and suffocation.
Not for sale in PR at the time of this catalog printing. EPA Reg. No. for 704700: 70950-2-84710.

WHITMIRE MICRO-GEN
RESEARCH LABORATORIES, INC.

PYRETHRUM TR MICRO TOTAL RELEASE INSECTICIDE

Pyrethrum TR is a ready-to-use, ultra low volume insecticide fogger. It effectively controls aphids, fungus gnats, mites and whiteflies, along with numerous other secondary insect pests. Pyrethrum TR is used as an early rotational insecticide and is labeled for use on ornamentals, herbs and vegetables.

* Test or spot spray plants before activating a total release is recommended. Registered in all states. EPA Reg. No. 499-479. Not for sale in NY at the time of this catalog printing.

Item No.	Description	Size	MSRP
704565	Pyrethrum TR	2 oz.	$29.95

ATTAIN® TR MICRO TOTAL RELEASE INSECTICIDE

Attain® TR Micro Total Release Insecticide/Miticide is a ready-to-use, ultra low volume insecticide fogger that controls a wide variety of greenhouse insect pests, including mites. Labeled for use in greenhouses on bedding plants, cut flowers, flowering hanging baskets, foliage, potted flowering plants and ornamentals. Great space mix with Preclude®. Active ingredient is Bifenthrin.
* Test or spot spray plants before activating a total release is recommended. EPA Reg. No. 499-472. Not registered in PR at the time of this catalog printing.

Item No.	Description	Size	MSRP
704575	Attain® TR Micro	2 oz.	$29.95

PRECLUDE® TR MICRO TOTAL RELEASE INSECTICIDE

Preclude® TR Micro Total Release Insecticide is a ready-to-use, ultra low volume insecticide fogger that controls a wide variety of greenhouse insects. Labeled for use in Greenhouses on Bedding Plants, Cut Flowers, Flowering Hanging Baskets, Foliage, Potted Flowering Plants and Ornamentals. Preclude® TR controls thrips, whiteflies, scale and aphids. See label for additional insects controlled. The active ingredient, fenoxycarb, is an insect growth regulator (IGR) that disrupts the insect's life cycle at immature stages.

* Test or spot spray plants before activating a total release is recommended. EPA Reg. No. 499-437. Not registered in CA at the time of this catalog printing.

Item No.	Description	Size	MSRP
704580	Preclude® TR	2 oz.	$27.95

1300 ORTHENE® TR MICRO TOTAL RELEASE INSECTICIDE

1300 Orthene® TR Micro Total Release Insecticide is a ready-to-use, ultra low volume insecticide fogger that controls a wide variety of greenhouse insect pests, including mites. Labeled for use in commercial greenhouses on bedding plants, cut flowers, flowering hanging baskets, foliage, potted flowering plants and ornamentals. Great mix with Preclude®.

* Test or spot spray plants before activating a total release is recommended. Registered in all states. EPA Reg. No. 499-421.

Item No.	Description	Size	MSRP
704585	1300 Orthene® TR	6 oz.	$34.95

FUNGAFLOR® TR

Prescription Treatment brand Fungaflor TR Dry Micro Total Release Fungicide - the first Total Release Fungicide with broad-spectrum prevention and control of fungal plant pathogens. Applying fungicides is easier than ever with Fungaflor® Total Release and it is a great addition to your fungicide rotation program.

- Use in Commercial Greenhouses
- Use on a variety of Bedding Plants, Cut Flowers, Hanging Baskets, Foliage, Potted Plants, Ornamentals and Perennials
- The prevention and control of Alternaria, Botrytis, Downy Mildew, Powdery Mildew, Rust and more!
- One 2 oz. can covers up to 1500 sq. ft.
- Grow room temperature must be 65˚ F or above when using Fugaflor® TR.

EPA Reg. No. 499-508. Not registered in NY at the time of this catalog printing.

Item No.	Description	Size	MSRP
704615	Fungaflor® TR	2 oz.	$29.95

1600 X-CLUDE® TIMED RELEASE PYRETHRUM

1600 X-clude® is a microencapsulated, time release insecticide packaged in a ready-to-use aerosol canister labeled for resale to retail consumers and interiorscapers. Labeled for use in hobby greenhouses, homes, interiorscapes and landscapes on potted and flowering plants, foliage, bedding plants, cut flowers and ornamentals. 1600 X-clude® controls aphids, fungus gnats, spider mites, mealybugs, whiteflies, spiders, ants, cockroaches and more. See label for additional insects controlled.

* Test or spot spray plants before activating a total release is recommended. Registered in all states. EPA Reg. No. 499-239.

Item No.	Description	Size	MSRP
704570	1600 X-clude®	20 oz.	$22.95

GREEN-SHIELD®

Green-Shield® Disinfectant & Algicide is a simple but cost effective way to control unwanted plant pathogens and algae. It is the first step in a successful disease management program. Labeled for use in Greenhouses, Nurseries, Landscapes and Interiorscapes on work areas, benches, tools, containers, walkways, floors and evaporative cooling pads. Green-Shield® controls fungal, bacterial and viral plant pathogens and algae.

Registered in all states. EPA Reg. No. 499-368.

Item No.	Description	Size	MSRP
704620	Green-Shield®	Quart	$18.49

PURESPRAY GREEN

Purespray controls most stages of greenhouse pests. It is an OMRI listed all season spray oil for insect, mite and disease control. Perfect for organic gardening and production. Excellent resistance management tool. It is the most highly refined horticulture oil available. **Kills eggs.**

Registered in all states. EPA Reg. No. 69526-9.

Item No.	Description	Size	MSRP
704610	Purespray Green	Quart	$25.95

PRO-CONTROL PLUS® TOTAL RELEASE AEROSOL INSECTICIDE

Item No.	Description	Size	MSRP
704595	Pro-Control Plus®	6 oz.	$8.49

Pro-Control Plus® Total Release Insecticide is a ready-to-use, ultra low volume insecticide fogger that controls a wide variety of insects. Labeled for use in greenhouses, apartments, basements, non-food areas of commercial building, houses, office buildings, sheds, or storage areas. Apply on bedding plants, cut flowers, flowering hanging baskets, foliage, potted flowering plants and ornamentals. Pro-Control Plus® controls thrips, whiteflies, scale, aphids, spiders, ants and more. See label for additional insects controlled. One 6 oz. can treats up to 5,000 cu. ft. of unobstructed space (25' x 25' x 8').

* Test or spot spray plants before activating a total release is recommended. Registered in all states. EPA Reg. No. 499-462.

SENSOR MONITORING CARDS

704562

704560

Item No.	Description	MSRP
704560	Sensor Yellow Monitoring Cards, 48 per pack	$32.95/pk
704562	Sensor Monitoring Cards, 12 per pack	$9.29/pk

- Superior, Post-Trap glue will not stick to your hands.
- Gridded for easy reading.
- Easy to remove covers.
- Durable, long lasting.
- Non-sticky edge.
- Catches winged aphids, leafminer adults, thrips, whiteflies, fungus gnat adults, shore flies, fruit flies, leafhoppers and other flying insects.

STICKY APHID WHITEFLY TRAPS

The Sticky Whitefly Traps do the following things: Protect plants from Whiteflies, Aphids and other flying insects. Last all season, even in rain, until completely coated with insects. Non-poisonous and easy to use.

Item No.	Description	Size	MSRP
704190	Sticky Whitefly Traps	3 pack	$119.95/cs
704195	Sticky Whitefly Traps	5 pack	$5.95/pk

STICKY THRIP LEAFMINER TRAPS

The Sticky Thrip Leafminer Traps does the following things:

- Protects plants from Thrips and Leafminers. Excellent protection for roses. Hang at plant level. Place traps every 7 feet apart or at end of each row.
- For badly infested plants, shake gently and flies will swarm a few moments before they fly to your nearby trap.
- Lasts all season, even in rain, or until completely coated with insects or dust.

EPA Reg. No. 47362-CA001.

Item No.	Description	Size	MSRP
704196	Sticky Thrip Leafminer Traps	5 pack	$5.95/pk

BUG SCREENS

- Active carbon inserts proven to catch all bugs, mold and mildew.
- Minimal air flow restriction.
- Easily slips on and off inline fans.
- Mildew and UV resistant.
- Custom fit 4, 6, 8, 10 and 12 inch sizes.

Item No.	Description	Size	MSRP
704215	Bug Screen	4"	$9.95
704220	Bug Screen	6"	$11.95
704225	Bug Screen	8"	$13.29
704230	Bug Screen	10"	$14.95
704235	Bug Screen	12"	$16.95

PROZAP® INSECT GUARD™

Kills flying and crawling insect pests including mosquitoes, flies, moths and spiders. This is long lasting, round the clock protection. Simply remove from package to activate Prozap® and to begin controlling action.

EPA Reg. No. 5481-338-47000. Not registered in CT, ME, MA, RI, PR AND WA D.C. at the time of this catalog printing.

"The best bug control I have ever seen for all indoor pests, no spraying, no bombs. Nothing works better on spider mites!!! THEY JUST WORK!"
Rick Johnson
Louisville Hydroponics

Item No.	Description	MSRP
704545	ProZap® Insect Guard™	$13.95

MOSQUITO DUNKS®

Excellent for Fungus Gnat Larva

Item No.	Description	MSRP
704650	Mosquito Dunks® - 2/card	$7.95
704655	Mosquito Dunks® - 6/card	$12.99

Moquito Dunks® are formulated to release effective levels of BTI for a period of 30 days or more under typical environmental conditions. The floating action of the dunks will ensure that active material is released at the surface as well as gradually settle to the bottom.

These dunks may be used in all types of containerized mosquito breeding areas. To prevent dunks from being flushed out of certain treatment sites, they can be anchored using a string tied through the hole in the center or staked in place.

Moquito Dunks® can also be applied to dry areas which are known or suspected to become breeding sites when flooded, such as abandoned swimming pools, the dunks will float to the surface when flooding occurs and start releasing the active BTI material. Alternate wetting and drying will not reduce their effectiveness. **EPA Reg. No. 6218-47.**

PURGE® III - CB FLYING INSECT CLEAN AIR™

Item No.	Description	Size	MSRP
700265	Purge® III Flying Insect Spray - Not registered for sale in CA	6.4 oz.	$13.29
700267	Purge® III Flying Insect Spray - Labeled for sale in CA	6.4 oz.	$19.95

700267 Labeled for sale in CA

700265 Not registered for sale in CA

Contains: 0.975% Pyrethrins, 1.950% PBO, technical, 3.050% N-Octyl bicycloheptene dicarbimoxide.

- Guaranteed effective 24 hours a day for a full 30 days.
- Kills and repels flies, mosquitoes, gnats and small flying moths.
- The most economically effective metered pyrethrin insecticide. Use with TimeMist® dispenser. **EPA Reg. No. 9444-158.**

DOKTOR DOOM® TOTAL RELEASE FOGGER

Item No.	Description	Size	Cubic Ft	MSRP
704400	Doktor Doom® Fogger	3 oz.	3,000	$8.95
704405	Doktor Doom® Fogger	5.5 oz.	5,500	$11.95
704410	Doktor Doom® Fogger	12.5 oz.	12,500	$18.95

A total release fogger for use in homeowner greenhouses, fruit and vegetable storage areas and indoor gardening areas. Can be used with all ornamental plants, flowers, fruits and vegetables. Used for controlling fungus gnats, spider mites, two-spotted spider mites, aphids, whiteflies, scale, mealy bugs and thrips. No residuals. Pyrethrum breaks down within hours.

- No restriction as to where it can be sold (Does not carry a commercial registration).
- Safe to use up to a couple of days before harvest.
- No need for safety goggles, respirators, gloves etc.
- Safe to re-enter treated areas in one, two and three hours–coinciding with size of containers 3 oz., 5.5 oz. & 12.5 oz.
- pH balanced formula without any perfumes or attars–ideal for those with post production of essential oils.
- No phyto-toxicity to plants providing product is used as directed on the label.

EPA Reg. No. 72804-1. Not for sale in CT, DE, IA, LA, MS, MT, NV, NH, NM, ND, OK, RI, SD, UT, and PR at the time of this catalog printing.

DOKTOR DOOM® SPIDER MITE KNOCK OUT®

Item No.	Description	Size	MSRP
704415	Spider Mite Knock Out®	16 oz.	$13.49

Doktor Doom® Spider Mite Knock Out® is a .20% pyrethrin formula. This formula is 19 times stronger in active ingredient pyrethrin than any soap based insecticides and 10 times stronger than any formulations that contain Pyrethrin & Piperoynl Butoxide. Piperoynl Butoxide is a synergist which enhances the killing power of Pyrethrin and it is not approved for organic gardening. Unlike soap based products which need to be applied liberally to the plant in order to drown the insects Doktor Doom® Spider Mite Knock Out® kills the pests on contact with just a light misting on the foliage.

Apply the Doktor Doom® Spider Mite Knock Out® to the underside of the leaves and then fog the room with a Doktor Doom® Fogger. The smell of Pyrethrin flushes out and eradicates insect pests on contact. **EPA Reg. No. 2724-568-72804.** Not for sale in CT, DE, IA, LA, MS, MT, NV, NH, NM, ND, OK, RI, SD, UT, and PR at the time of this catalog printing.

GREENHOUSE VAPORIZOR

- Heat plate is automatically regulated to ideal vaporizing temperature (140° C).
- Quality construction.
- Safe (outside is not hot to the touch).
- One unit is capable of treating up to 1000 Sq Ft.
- Suspend with jack chain 3' away from any combustible surface.

Item No.	Description	MSRP
704050	Greenhouse Vaporizor	$127.95
704060	Replacement cup	$14.95
704051	Replacement power cord	$14.95

MAGNIFIER LOUPE - 30X

Extremely powerful 30X magnification from optical-quality double glass lenses shows ultra-fine detail. This teardrop shaped folding magnifier is compact in size and has an attractive appearance with chrome plated exterior. Great detail for finding the smallest of pests on your plants. Comes in a plastic protective case.

Item No.	Description	MSRP
704465	30X Magnifier Loupe	$12.95

MICROSCOPE ZOOM 60x- 100x ILLUMINATED – ECOPLUS®

A very powerful illuminated pocket microscope offers adjustable magnification from 60x - 100x. Identify even the smallest pests with this microscope. Includes batteries and protective case. Actual size of microscope is 1 ¼" wide by 3¼" tall.

Item No.	Description	MSRP
704478	EcoPlus® 60x - 100x Illuminated Microscope	$18.49
704479	Replacement batteries for 60x - 100x Microscope (requires 3 eaches)	.95¢/ea

MICROSCOPE 30x ILLUMINATED - ECOPLUS®

A precision illuminated microscope with 30x magnification power. Focus can be adjusted by turning the wheel. Rotatable bulb can pinpoint the light on the object. Use to classify the type of pest invading your plants. Comes with protective case. Requires 2 AA batteries (not included). Actual size of microscope is 1¾" wide by 5⅝" tall.

Item No.	Description	MSRP
704477	EcoPlus® 30x Illuminated Microscope	$18.49

SERENADE® GARDEN DISEASE CONTROL

Item No.	Description	Size	MSRP
704341	Serenade® Garden RTU	32 fl. oz.	$10.69
704345	Serenade® Garden CONCENTRATE	32 fl. oz.	$22.99

Controls bacterial spot, powdery mildew, rust, gray mold, leaf blight, scab and more. For home gardeners, Serenade® Garden Disease Control is the safe, natural, broad spectrum, effective fungicide that controls harmful garden diseases and is approved for organic gardening.

- Same effective active ingredients used by 1000's of commercial growers.
- Broad spectrum control of fungal and bacterial diseases.
- No weather or timing restrictions for application.
- OMRI listed product and listed with EPA/USDA National Organic Program (NOP).
- So safe, you can treat, pick and eat fruits/vegetables/flowers the same day.
- No phyto-toxicity issues.
- Concentrate mixing ratio = 1 oz. per gallon.

EPA Reg. No. for RTU 69592-16. EPA Reg. No. for Concentrate 69592-12. Registered in all states.

TREE TANGLEFOOT PEST BARRIER

Tree Tanglefoot Pest Barrier is effective against crawling insects who must reach the tops of trees in order to feed, mate, or deposit eggs. Such insects include cankerworms, gypsy moth caterpillars, army and tent caterpillars, ants, obscure root weevils and pecan weevils, tussock moths and climbing cutworms. It is a part of their life cycle that they crawl up the trunks of trees to mate and deposit eggs. Other insects simply crawl up the trees to feed on their buds, leaves and fruit, consequently devastating the tree.

Tree Tanglefoot Pest Barrier provides the perfect solution to protecting your valuable trees and reducing future populations of these pests. As the insects climb up over the sticky material, they become trapped without escape. Best of all, the action is strictly mechanical - no pesticides or harmful chemicals are involved.

Item No.	Description	Size	MSRP
704675	Pest Barrier	6 oz.	$6.95

DON'T BUG ME®

Don't Bug Me® is a fast, effective solution for most common garden pests. Because its active ingredient is Pyrethrum, which is derived from chrysanthemum flowers, it can be applied up to the day of harvest on any fruit or vegetable. Don't Bug Me® kills aphids, whitefly, and other insects on contact by damaging their nervous systems, and even at lower levels it will keep pests away. Best of all, Don't Bug Me® breaks down quickly and does not persist in the environment.
EPA Reg. No. 1021-1705-071996. Not registered in AL, AR, MT, NY, NC, and SD at the time of this catalog printing.

Item No.	Description	Size	MSRP
704085	Don't Bug Me®	24 oz.	$14.59

HOT PEPPER WAX

Hot Pepper Wax Insect Repellent is a natural garden/greenhouse spray repellent and insecticide. It is proven effective against aphids, spider mites, whiteflies, cabbage loopers and beet armyworms for up to 2 weeks. Using a special formula and process (both of which are patented), Hot Pepper Wax blends capsaicin with highly refined "food-grade" paraffin wax and other ingredients. The result is a spray that coats plants with a harmless, micro-thin barrier to deter pests. Some insects are done in by capsaicin, others by the wax. Hot Pepper Wax also works as an "anti-transpirant," reducing water loss and resulting stress... a true benefit for new transplants! Hot Pepper Wax is perfectly safe for garden produce. Warm water rinses it completely away! **EPA No. for RTU is 67238-2 and EPA No. for Concentrate is 67238-1.**

Item No.	Description	Size	MSRP
704680	Hot Pepper Wax RTU	22 oz.	$10.95
704685	Hot Pepper Wax CONCENTRATE	16 oz.	$11.95

ORGANOCIDE™ ORGANIC INSECTICIDE

OMRI™ Listed

ORGANIC

A nature-safe, organic spray oil effective on a wide variety of insects, mites, armored and soft scales and certain fungal diseases. It is insecticidal to the eggs, larvae, and nymphs of insects and adults of soft bodied insects. Controls a wide range of mite and insect pests, and certain fungal diseases such as powdery mildew, black spot on roses, helminthesporium and greasy spot on citrus. Use on vegetables, fruits, nuts, vine crops, herbs, ornamentals, greenhouse crops, landscape plants, bulbs, flowers and field crops. Active Ingredient: sesame oil 5.0% / Inert Ingredients: edible fish oil 92.0% and Lecithin 3.0%. Dilution Rate: Mix 2 oz. with 1 gallon of water. Exempt from EPA registration.

Item No.	Description	Size	MSRP
704100	Organocide™ - CONCENTRATE	Quart	$20.49
704102	Organocide™ - RTU	24 oz.	$13.49

TAKE DOWN GARDEN

- A ready-to-use insecticide containing natural pyrethrin plus canola oil.
- Good replacement for Dursban® or diazinon products.
- Use on vegetables, fruits, houseplants, ornamentals, etc.
- Controls aphids, beetles, mealy bugs, caterpillars, plant bugs, etc.
- Dormant and growing season insect spray.
- Insecticide from plants for plants.
- Does not persist in the environment.
- Kills all stages of insects, including eggs.

EPA Reg. No. for RTU 67702-6-54705. EPA Reg. No. for Concentrate 67702-5-54705. Not registered in AL, AR, GA, LA, ND, OK and WY at the time of printing.

Item No.	Description	Size	MSRP
704602	Take Down Garden Spray RTU	22 oz.	$11.49
704603	Take Down Concentrate	Pint	$13.95

INSECT SPRAY WITH SPINOSAD

OMRI™ Listed

ORGANIC

For control of foliage feeding worms (caterpillars), thrips, fire ants and other listed pests in: Lawns, Outdoor Ornamentals, Vegetables, Apples, Citrus and Stone Fruit.

- Contains spinosad, produced by fermentation.
- New chemistry for insect control.
- B.T. replacement, more effective pest control.
- Can be used on vegetable, fruit crops, ornamentals, and turf.
- Controls caterpillars as well as beetles, leafminers, thrips, beetles and more!

U.S. Patent Nos. 5,362,634 and 5,496,931
EPA Reg. No. 62719-314-54705

Item No.	Description	Size	MSRP
704606	Insect Spray with Spinosad	Pint	$15.95
704607	Insect Spray with Spinosad	Quart	$25.95
704608	Insect Spray w/ Spinosad (SO)	Gallon	$83.95

OMRI™ Listed

ORGANIC

ORANGE GUARD® ORNAMENTAL INSECTICIDE

Food grade insecticide concentrate that is diluted for use. Kills and repels all known insects found on plants. Active ingredient derived from oranges. Dilute with water 4:1.
EPA Reg. No. 61887-3.

Item No.	Description	Size	MSRP
704300	Orange Guard®	Gallon	$34.95

GARDENEER DEER-X®

Temporary fencing protects shrubs, trees and vegetable gardens from destructive deer. Strong and durable ¾" mesh provides an easy and affordable alternative to metal chicken wire.

Item No.	Description	MSRP
740590	Deer-X® Netting 7' x 100'	$27.49

TIMEMIST® PLUS METERED DISPENSER

Item No.	Description	MSRP
700270	Timemist® Plus Programmable Dispenser	$51.95

- Programming Features: Time of Day, Start/Stop Times, Light (30 Mins), Medium (15 Mins), Heavy (7.5 Mins) Spray Settings.
- Other Features: LED Service Reminder, Audio Service Reminder, LED Battery Replacement Reminder, Lifetime Quality Guarantee, Utilizes 2 "C" Cell Batteries.
- For use With TimeMist® and Clean Air™ Purge® Metered Aerosols.

Sophistication and intelligence in a programmable dispenser. The TimeMist® Plus utilizes cutting-edge electronics to offer simple and complete programmability. It allows you to control fragrance intensity using spray settings (Light, Medium and Heavy) that fit your odor control needs. Saves time, reduces labor and lowers costs.

Safer® BRAND

HOUSEPLANT INSECT KILLER - AEROSOL

A fast acting yet environmentally friendly alternative. Kills insects (such as aphids, whiteflies, spider mites, mealy bugs and more) on contact. Aerosol is powered by compressed air. Gentle mist sprays from any angle. Contains no ozone depleting propellants. Contains: Pyrethrins (.012%) and potassium salts of fatty acids (insecticidal soap - 1.015%).
Registered in all states. EPA Reg. No. 59913-10.

Item No.	Description	Size	MSRP
704460	Houseplant Insect Killer Aerosol	10 oz.	$8.95

END ALL™ INSECT KILLER

Kills over 45 different types of insects indoors and out. Wipes out insects & eggs with the combined killing power of pyrethrin & neem oil. Can be used up to day of harvest. For use on fruits, vegetables, flowers, trees & ornamentals. **EPA No. 59913-14.** Not for sale in TX and PR at the time of printing.

Item No.	Description	Size	MSRP
704156	End ALL™ Insect Killer	32 oz.	$10.95

3-in-1 GARDEN SPRAY

Provides three garden solutions in one: fungicide, insecticide, miticide. Its formulation kills garden insects and mites and controls fungal diseases. Contains patented formula to help reduce injury to most plants. **Registered in all states. EPA Reg. No. 59913-12.**

Item No.	Description	Size	MSRP
704145	3-in-1 Garden Spray RTU	32 oz.	$11.19

YARD & GARDEN INSECT KILLER

An environmentally friendly solution. Kills insects on contact, gentle on plants. Use on flowers, vegetables, shrubs, and ornamentals. Use up to day of harvest. Potassium salts (insecticidal soap) weaken the insect's protective outer shell. Pyrethrins attack the insect's nervous system. **Registered in all states. EPA No. 59913-10.**

Item No.	Description	Size	MSRP
704105	Yard & Garden Insect Killer RTU	32 oz.	$10.79

GARDEN FUNGICIDE

Can be used on fruits, flowers, vegetables, flowering plants, and ornamentals. Controls and prevents black spot, rust, leaf spot, and powdery mildew on roses. Contains sulfur. Registered in all states. **EPA No. for RTU 59913-11, EPA No. for Concentrate 42697-37.**

Item No.	Description	Size	MSRP
704140	Garden Fungicide RTU	32 oz.	$10.69
704141	Garden Fungicide CONCENTRATE	16 oz.	$15.29

INSECT KILLING SOAP

Use on houseplants, ornamental foliage plants, flowering plants, and fruits and vegetables. Kill aphids, mealy bugs, spider mites, and whiteflies. Registered in all states. **EPA No. for RTU is 42697-59, EPA No. for Concentrate is 42697-60.**

Item No.	Description	Size	MSRP
704115	Insect Killing Soap RTU	32 oz.	$10.79
704116	Insect Killing Soap CONCENTRATE	16 oz.	$15.39

BIONEEM®

Neem Oil insect control for Bedding, Potted Plants, Trees & Shrubs, Lawns, Yard & Landscape, House Plants, Vegetable & Fruit Crops. Unique insecticide and repellent that controls over 30 common insect pests. Use on trees, shrubs, ornamentals, and flowers. Neem disrupts hormonal balance. Insects die before molting to next stage.
Registered in all states. EPA Reg. No. 70051-6-42697.

Item No.	Description	Size	MSRP
704150	Bioneem® Insecticide CONCENTRATE	16 oz.	$20.95

CATERPILLAR KILLER WITH B.T.

After consuming, caterpillars stop eating and die within a few days. Use in late afternoon or on cloudy days since the BT breaks down in sunlight. Controls tent caterpillars, gypsy moths, cabbage loopers, tomato horn worms, and more. For trees, shrubs and vegetables. **EPA Reg. No. 42697-23.**

Item No.	Description	Size	MSRP
704155	Caterpillar Killer with B.T. CONCENTRATE	8 oz.	$15.95

PURE NEEM OIL LEAF POLISH

Item No.	Description	Size	MSRP
704425	Pure Neem Oil	8 oz.	$9.90
704430	Pure Neem Oil	Quart	$31.25

ORGANIC

Neem oil is pressed from the seed of the neem tree. Neem oil leaves a natural shine on leaves without clogging stomata that leaves need to take in carbon dioxide and release oxygen and water vapor essential to the basic functioning of the photosynthesis process. Pure Neem Oil is an organic all natural leaf polish that leaves a natural shine.

EINSTEIN OIL® LEAF SHINE

Item No.	Description	Size	MSRP
704535	Einstein Oil® Leaf Shine	4 oz.	$21.95
704540	Einstein Oil® Leaf Shine	Pint	$64.95

ORGANIC

Einstein Oil® is enhanced with several other potent herbal ingredients that greatly increase its effectiveness. All ingredients are 100% non-toxic. This popular leaf shine keeps leaves clean and plants healthy. Einstein Oil® is an easy to mix concentrate. Mix 1/2 - 2 tsp. per quart of water.

GOGNATS

Item No.	Description	Size	MSRP
720327	goGnats Liquid Concentrate	16 oz.	$23.62

goGnats is a poison-free alternative for the control of soil-fungus gnats, mites, aphids, moths, and other garden and hydroponic pests. goGnats liquid may be used as a plant and area spray, added to nutrient reservoirs or used as a soil drench. For hydroponics, it is recommended to add directly to reservoirs on a regular basis as part of a plant maintenance program. Can be applied as an area spray or added to fertilizers and applied during feeding. For indoor/outdoor plants. *Exempt from EPA registration under section 25(b) of FIFRA. Not for sale in IN, KY, MS, TN and VT at the time of this catalog printing.

MM2000™ 0 - 0 - 1

Item No.	Description	Size	MSRP
733010	MM2000™	1 Liter	$17.95
733015	MM2000™	4 Liter	$63.95

MM2000™ is an organic-based, biodegradable and non-toxic (animals and humans) stress relieving product, designed to promote/maintain better plant growth. Its major constituents are some beneficial plant nutrients, amino acids, plant extracts and essential oils, which help plants in maintaining vigorous plant growth and better utilizing plant nutrients. Plant derived amino acids provide instant energy that can support the plant to come out of any stress.

BOTANI WIPE™

Item No.	Description	MSRP
704371	Botani Wipe™ - 25 wipes/pack	$6.99
704370	Botani Wipe™ - 50 wipes/pack (While quantities last)	$10.95

Bigger is Better! BotaniWipes new 7 inch x 9 inch neem oil wipes are a perfect late and early season PROBLEM solver and great for keeping lighting fixtures, hoods, fans, blade tools, your hands and MORE. Clean with the amazing benefits of Organic NEEM OIL and Lavender oil! Try em today! Available Exclusively at NGW!

JUNGLE RAIN CLEAN LEAF

Item No.	Description	Size	MSRP
704330	Jungle Rain RTU	32 oz.	$9.95
704335	Jungle Rain CONCENTRATE (makes 10 gallons)	Quart	$21.95

A unique blend of natural castile soap, citrus oil and vegetable oils. Jungle Rain Clean Leaf is one of our safest, most versatile garden sprays. Natural and non-toxic. So safe that fruits and vegetables can be harvested immediately after use. Castile soap loosens the surface tension of the soil allowing better water and fertilizer penetration. It contains no phosphates, but does contain potassium that promotes stronger roots and better plant defense system against future problems.

Geohumus®

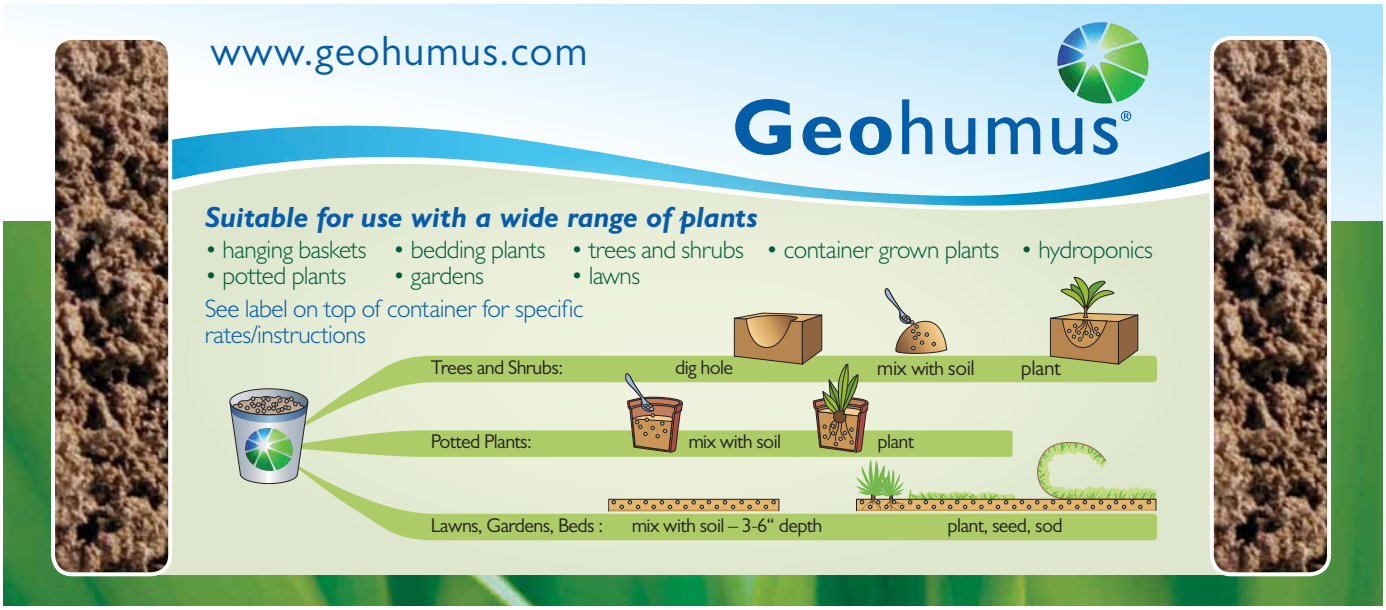
Soil Additive for Water Retention and Release

Just Add It!

NEW!

industry Exclusive

Geohumus is completely different than "water-holding" polymer products on the market. It is a natural product derived from volcanic rock & organic polymers. In addition to having better water holding and release characteristics, its natural minerals can have a positive effect on soil condition properties and overall plant health.

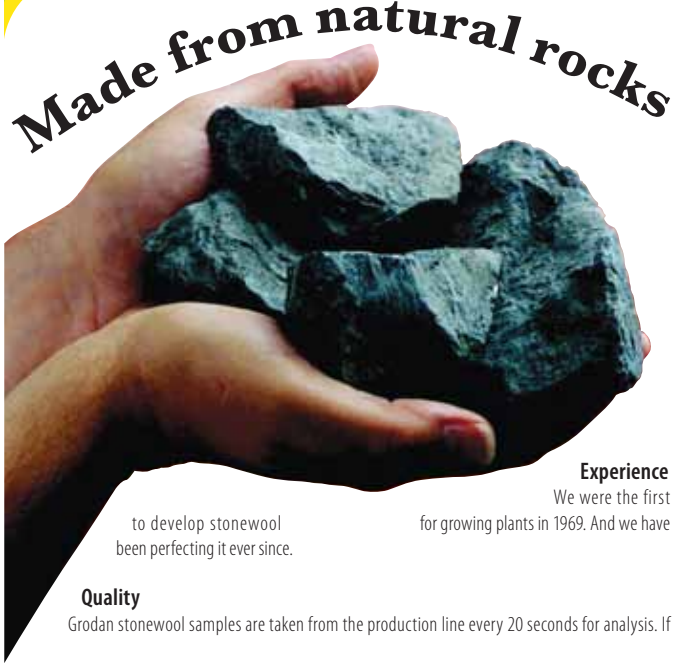


GEOHUMUS® Soil Additive for Water Retention and Release

Item No.	Description	Size	MSRP
714850	Geohumus®	1 lb Cup	$9.99
714855	Geohumus®	10 lb Bucket	$69.99

Geohumus® is a novel soil additive manufactured in Germany with excellent water absorbing and releasing properties. It is a unique material combining an efficient water absorbing polymer with mineral components. Geohumus® is an odorless, sponge-like granulate which retains its structural stability in the soil together with its high water absorption and release capacity. The key benefit of Geohumus® is that it provides more plant available water over an extended period of time, compared to soils without Geohumus®. It is very easy to apply.

grodan® Gardening made easy



Experience
We were the first for growing plants in 1969. And we have been perfecting it ever since.

Quality
Grodan stonewool samples are taken from the production line every 20 seconds for analysis. If there is a problem, the wool is melted and the process starts again. Such dedication has earned our product the international quality rating ISO 9001.

What is Grodan® stonewool?

Made from natural melted rocks blown into mineral fibers, Grodan stonewool (generically known as rockwool) has become the preferred choice for soil-less growing worldwide. Using our exclusive Delta® Technology for improved fiber structure and layering, we create perfectly uniform products that are both inert and compliant to the highest environmental & quality standards. This provides a clean medium for growing spectacular vegetables, fruits and vibrant flowers.

Support

Whether you are a beginner or experienced Grodan gardener, we are here to help. Our website offers great information, downloads and the opportunity to contact us directly. Grodan will always work hard to be the only rockwool manufacturer that offers the highest level of technical support. www.hydroponics101.com

Environmental Stewardship

Much of the new Grodan is made from used stonewool. The wool is still the same top notch quality as when we make the wool from new rocks.
www.eco-label.com
The European standard for earth friendly products.

GRODAN® STONEWOOL A-OK STARTER PLUGS®

A-Ok Starter Plugs for starting seeds and rooting of cuttings prior to plugging into the larger Gro-Blocks. A-Ok plugs come labeled with instructions in a shrink-wrapped sheet that fits a standard 10x20 tray (flat). Note: Item #713020 is supplied without shrink wrap.

Item No.	Description	Plugs/Sheet	MSRP Case	MSRP Each
713020	A-Ok 25/40 - 1" x 1" plugs	200	$372.41	$13.66
713025	A-Ok 36/40 - 1.5" x 1.5" plugs	98	$337.36	$12.37
713030	A-Ok 50/40 - 2" x 2" plugs	50	$293.55	$10.76

GRODAN® STONEWOOL GRO-SLABS®

Gro-Slabs provide the final stage for growing a spectacularly large plant. Transplant your Gro-Block plant onto a slab just like professional growers. They come in clearly marked biodegradable UV resistant sleeves for comfortable handling and algae prevention.

- Expert vertical fibers for faster drainage; best for hobbyists
- Classic horizontal fibers for slower drainage; best for hot/dry climates

GRODAN® STONEWOOL UNI-SLAB

All plant roots are protected and contained for the life of the plant. Due to its size, the Uni-Slab is perfect for one large plant. Uni-Slab has the benefits of a slab with the versatility of a block.

Item No.	Description	Dimensions	MSRP Case	MSRP Each
713000	Expert Fat Slab - 15/100	6" x 4" x 36"	$81.11	$9.91
713005	Expert Slab - 15/75	6" x 3" x 36"	$81.12	$7.44
713010	Expert Slab - 20/75	8" x 3" x 36"	$105.31	$9.65
713015	Classic Slab - 30/75	12" x 3" x 36"	$105.86	$14.56
713018	Uni-Slab	9.5" x 8" x 4"	$78.73	$5.41

GRODAN® STONEWOOL MACRO PLUGS

Item No.	Description	Plugs/Bag	MSRP Case	MSRP Each
713035	Macro Plugs - 1.5" round plugs with slit for cuttings - bulk	n/a	$312.44	.17¢
713038	Macro Plugs - 1.5" round plugs with slit for cuttings	50	$341.64	$10.74

Macroplugs have a slit that allows easy insertion of a cutting. These loose round plugs fit perfectly into the Gro-Block hole. For best results with these Macroplugs always insert them in a tray with individual cells. The individual cell will make sure the plug stays closed around the stem of your cutting. Same great product with new packaging. Now 50 Macro Plugs in gold foil bag that can be hung up.

GRODAN® STONEWOOL DELTA® STARTER MINI-BLOCKS®

Item No.	Description	Plugs/Strip	MSRP Case	MSRP Each
713040	1.5" Starter Mini-Blocks 3-15 strips per wrap 1.5" x 1.5" x 1.5" MM40/40	15	$385.66	$8.48
713045	2" Starter Mini-Blocks 2-12 strips per wrap 2" x 2" x 1.5" MM50/40	12	$345.33	$6.33

Mini-Blocks sit in a tray (flat) without support for easy starting of seeds and cuttings. These Mini-Blocks are individually wrapped in white plastic to minimize algae growth. Remove wrapping and transplant into any loose media such as Growcubes or coconut fiber or leave wrapping on and set on top of a larger Gro-block. Packed in easy tear away strips, labeled with instructions.

PARGRO QUICK DRAIN

NEW!

Same quality,
Same value-priced,
Driest value-priced rockwool on the market *

- Made at the Grodan factories.
- Better quality and drainage than other value-priced rockwool.*

*Resting saturation measurements taken from QD slabs vs. Neptune slabs. Pargro QD was 10% drier than Neptune slabs. Pargro Neptune has been discontinued.

PARGRO® QUICK DRAIN STONEWOOL

Item No.	Description	Dimensions	Pieces/Unit	MSRP Case	MSRP Each
713210	Pargro QD 1.5" plugs (1372) - 98/sheet	1.5" x 1.5" x 1.5"	98	$130.41	$10.25
713215	Pargro QD 1.5" block (1170) - 45 blocks/strip	1.5" x 1.5" x 1.5"	45	$144.32	$6.11
713220	Pargro QD 3" block (192), 8/strip ***Hole***	3" x 3" x 2.5"	8	$83.44	$3.82
713223	Pargro QD 3" block (192), 8/strip ***No Hole***	3" x 3" x 2.5"	8	$83.44	$3.82
713225	Pargro QD 4" x 2.5" block (216), 6/strip ***Hole***	4" x 4" x 2.5"	6	$126.18	.64¢
713230	Pargro QD 4" x 4" block (72), 6/strip ***Hole***	4" x 4" x 4"	6	$69.11	$6.34
713235	Pargro QD 6" x 36" slab	36" x 6" x 3"	1	$60.67	$5.56
713240	Pargro QD 8" x 40" slab	40" x 8" x 3"	1	$92.42	$8.24
713250	Pargro QD Jumbo block ***Hole***	6" x 6" x 4"	1	$64.96	$1.99
713255	**Paragro QD Biggie Block 6" *Hole***	6" x 6" x 6"	1	$59.64	$2.73

Item No.	Description	Dimensions	Blocks/ Strip	MSRP Case	MSRP Each
713050	Delta 4, 3" Block ***No Hole*** (15 plt)	3" x 3" x 2.5"	8	$233.14	$5.34
713055	Delta 4, 3" Block ***Hole*** (15 plt)	3" x 3" x 2.5"	8	$233.15	$5.34
713060	Delta 5.6, 3" Block ***Hole*** (15 plt)	3" x 3" x 4"	8	$233.10	$8.01
713065	Delta 6.5, 4" Block ***Hole*** (15 plt)	4" x 4" x 2.5"	6	$181.47	$5.54
713070	Delta 8, 4" Block ***No Hole*** (15 plt)	4" x 4" x 3"	6	$209.62	$7.69
713075	Delta 8, 4" Block ***Hole*** (15 plt)	4" x 4" x 3"	6	$209.53	$7.68
713080	Delta 10, 4" Block ***Hole*** (15 plt)	4" x 4" x 4"	6	$196.28	$9.00
713085	Hugo 6" Block ***Hole*** (12 plt)	6" x 6" x 5.8"	1	$149.59	$3.43
713088	Big Mama Block	8" x 8" x 8"	1	$126.77	$7.75

GRODAN® STONEWOOL DELTA® GRO-BLOCKS®

Gro-Blocks are similar to a 'plant container'. Need a 3" pot? Then choose a 3" Gro-Block. Small plants can be fully grown in our larger Gro-Blocks. Holes are perfect size for any 1.5" starter plug. Come in packs labeled with instructions.

GRODAN® STONEWOOL DELTA® BIG MAMA BLOCK

Grodan's largest block ever produced! Big enough to grow a large plant for its entire life. More than twice the amount of wool as our Hugo Block.

GRODAN® STONEWOOL GRANULATE

Granulated rockwool works great on its own or mixed with other loose media such as expanded clay rocks or coconut fiber. If planting in containers outdoors, Water Absorbent Granulate is the best medium of choice.

Item No.	Description	Bag lbs	MSRP Case	MSRP Each
713090	Grodan Absorbent Granulate	45	$66.97	$1.64

GRODAN® STONEWOOL GROW CHUNKS

Light, airy & versatile. Grow Chunks are about 3/4 inch square each and can be used in pots around blocks or alone. They are easily combined with other media, such as layering with coco fiber or clay pellets. They can also be combined with soil for added aeration and increased moisture holding properties. Great for hydro systems or container gardening.

Item No.	Description	Bag Size	Bag lbs	MSRP Cs	MSRP Ea
713108	Grodan Grow Chunks	2 cu ft	18	$111.05	$40.72

GRODAN® STONEWOOL GROWCUBES

Item No.	Description	Bag Size	MSRP Case	MSRP Each
713095	Grodan growcubes - Large	2 cu ft	$111.05	$40.72
713100	Grodan growcubes - Medium	1 cu ft	$137.16	$25.15
713105	Grodan growcubes bulk - Loose	—	$90.02	–

Growcubes are small loose 1/2" cubes of stonewool. Advantages are better aeration, maximum drainage so that you can hardly ever over water your plant, easy mixing with other loose media (such as expanded clay rocks or coconut fiber), lightweight and much cleaner than peat-based media. The properties of Growcubes make it like a 50/50 mix of absorbent to repellent stonewool.

CROP CIRCLES

Item No.	Description	Cs Qty	MSRP
714550	Crop Circles Premium Coir Fiber	20	$34.95/cs

An organic potting medium made from natural coconut fibers, this medium is ideal for hydroponic and mixed media cultivation. Each Crop Circle disk expands to about five times its compressed size. Crop Circle disks are a shredded form of coco, as opposed to the coffee ground consistency of competitive products, which results in a much higher air to water ratio, extremely important for healthy root development. Crop Circles are entirely organic and manufactured from renewable resources. Each disk fills a one gallon container. Dimensions of compressed disk 5" diameter x 1½" thick.

ORGANIC

BLOCK COVERS - 4" & 6"

Item No.	Description	MSRP
714820	4" Block Cover - 40 per pack	$7.95
714822	6" Block Cover - 40 per pack	$15.49

- For blocks of rock wool and other grow media.
- Blocks light from media— reducing algae and pest problems.
- Use white side up to reflect light.
- Use toothpick to hold cover in place.

CUBE CAP™

Item No.	Description	MSRP
714865	Cube Cap™ - 3"	$1.79
714870	Cube Cap™ - 4"	$1.99
714875	Cube Cap™ - 6"	$2.49

The Cube Cap™ enables you to naturally and efficiently eliminate algae, fungus gnats and their root eating larva found on rock wool and coco growing blocks. It is one of the first environmentally safe solutions available. In addition, you are able to recycle and reuse the Cube Cap™ thus saving on costs.

The Cube Cap™ deprives the cube of its light by reflecting it back up towards the plant and away from the top of the block thus, making it difficult for any dark green algae to form. The Cube Caps patented technology allows the necessary air exchange by way of its unique elevated, vented design. Designed for use with 3", 4" and 6" rockwool blocks.

VERMICROP ORGANICS

COCONOT™ PREMIUM COCONUT COIR ALTERNATIVE

ORGANIC

Item No.	Description	Bag Size	Bag lbs	MSRP
720395	CocoNot™ Coir Alternative WEST	2 cu ft	26	$19.99
720395	CocoNot™ Coir Alternative TN/PA	2 cu ft	26	$22.49
720395	CocoNot™ Coir Alternative FL	2 cu ft	26	$27.49

CocoNot, sourced from the US is a natural and organic substitute for coconut coir, peat moss and other soilless mediums and conditioners. CocoNot is made by a special 6 step process to provide a perfect ratio of grinds and pith thus providing the plant with an exact medium structure for optimal root growth and moisture capacity.

- No Salt!
- Better air to water ratio than coco and peat moss.
- Higher porosity than coco and peat moss.
- Porous micro structure.
- pH buffered to 6.0 - 6.5.
- Slightly charged with nutrients N-Mg-Ca.

VERMIBLEND™ PREMIUM SOIL AMENDMENT 1.0 - 1.5 - 0.6

ORGANIC

Item No.	Description	Bag Size	Bag lbs	MSRP
720755	VermiBlend™ Soil Amendment WEST	1 cu ft	40	$17.99-$27.99
720755	VermiBlend™ Amendment Soil TN/PA	1 cu ft	40	$21.99-$29.99
720755	VermiBlend™ Amendment Soil FL	1 cu ft	40	$22.99-$29.99

Vermicrop Organics VermiBlend Premium Soil Amendment was created for the organic gardener. VermiBlend Premium Soil Amendment has a unique blend of earthworm castings, compost, fossilized kelp, humus, rock minerals, and mycorrhizae to provide ample amounts of micro nutrients, trace minerals, and beneficial microbes.

VERMISOIL™ PREMIUM POTTING SOIL

ORGANIC

COMING SOON!

Item No.	Description	Bag Size	Bag lbs	MSRP
720755	VermiBlend™ Soil Amendment WEST	1 cu ft	40	$17.99-$27.99
720755	VermiBlend™ Amendment Soil TN/PA	1 cu ft	40	$21.99-$29.99
720755	VermiBlend™ Amendment Soil FL	1 cu ft	40	$22.99-$29.99

Hello soil growers! If you are interested in growing the best high yielding plants start with the best soil; Vermicrop Organics Premium Potting Soil is a rich blend of professional grade organic materials. Coconut Coir, Earth Worm castings, Peat Moss, Vermicrop Organics Premium Compost, Bat Guano and Mycorrhizae are some of the key elements in this rich potting soil. This formula was created and tested by a team of industry leaders to provide a perfect blend of organic materials and plant food. We are proud to offer you this exciting product and hope you enjoy the fruits of your labor as much as we do!

GOLD LABEL – COCO

NEW! COMING SOON!

Item No.	Description	Bag Size	Bag lbs	MSRP
713755	Gold Label - Coco WEST	50 Liter	38	$33.95
713755	Gold Label - Coco TN/PA	50 Liter	38	$31.95
713755	Gold Label - Coco FL	50 Liter	38	$33.95

Gold Label Coco is manufactured using the fibers from the husk of the coconut. Only matured woody brown husk is used for optimal quality and stability of the substrate. The husk fibers are washed to remove excess E.C., buffered to remove potassium and then sieved into fine fibers. All the processing is done in an environmentally friendly way under supervision of the RHP authority. Gold Label Coco is RHP Horticulture certified thus ensuring quality, stability and crop safety.

Mineral as well as organic nutrients can be used with this fully organic, recyclable top quality substrate. The light weight makes it easy to handle and process.

GOLD LABEL – HYDRO KORRELS

NEW! COMING SOON!

Item No.	Description	Bag Size	Bag lbs	MSRP
713750	Gold Label - Hydro Korrels WEST	50 Liter	38	$39.95
713750	Gold Label - Hydro Korrels TN/PA	50 Liter	38	$37.95
713750	Gold Label - Hydro Korrels FL	50 Liter	38	$39.95

Gold Label Hydro Clay Pebbles are manufactured using a mix of the best quality pure clay and are baked in an open furnace using high grade clean fuels, guaranteeing absence of heavy metals or other contaminates. Gold Label Hydro Korrels proudly carries the RHP for horticulture quality certificate.

Gold Label Hydro Korrels is the inert hydroponics substrate of choice for professionals. The 8-16 mm size provides stability and the unique uneven shape of the pebble is an ideal surface for roots and beneficial bacteria. The porous structure has a high water capacity and is suitable for both ebb/flood and top irrigation systems. Will not float!

ROYAL GOLD BASEMENT MIX

Item No.	Description	Bag Size	Bag lbs	MSRP
715225	Royal Gold Basement Mix WEST	1.5 cu ft	46	$15.95
715225	Royal Gold Basement Mix TN/PA	1.5 cu ft	46	$19.95
715225	Royal Gold Basement Mix FL	1.5 cu ft	46	$20.95

Royal Gold has developed Basement Mix with extensive field research throughout Humboldt County. Using farmers, gardeners and laboratory analyses we have developed the highest quality organic soil-less mix available on the market. Light charged with organic nutrients and the proper ratios of air to moisture. As each component plays an important role in the quality and consistency of the end product, proportions are measured and mixed with state of the art equipment, which insures premium quality in each bag.

ROYAL GOLD MENDO MIX

Item No.	Description	Bag Size	Bag lbs	MSRP
715230	Royal Gold Mendo Mix WEST	1.5 cu ft	46	$15.95
715230	Royal Gold Mendo Mix TN/PA	1.5 cu ft	46	$19.95
715230	Royal Gold Mendo Mix FL	1.5 cu ft	46	$20.95

Simply put, The Mendo mix is strong! In our laboratory and performance test the Mendo Mix out preformed all its competitors, for transition, growth, and quality of fruit. Fortified with the highest quality ingredients, the formula is based on years of standard Humboldt soil building techniques. Established plants that have been root bound in a smaller containers transplant the best. Fresh rooted cuttings often have problems adjusting to the extreme nutrient charge.

ROYAL GOLD LOOSE COCO FIBER

Item No.	Description	Bag Size	Bag lbs	MSRP
715235	Royal Gold Coco Mix WEST	1.5 cu ft	46	$15.95
715235	Royal Gold Coco Mix TN/PA	1.5 cu ft	46	$19.95
715235	Royal Gold Coco Mix FL	1.5 cu ft	46	$20.95

Our loose coco fiber is designed for hydroponic use; but also works well with pots and beds and all other growing techniques. Most coco coir products on the market are a dust by product produced from the coconut industry. We Steam Pasteurize our coco to guarantee against any unwanted weeds, seeds, and bacteria. Our coco is a propriety blend of diverse particle size. We have the highest air porosity rate of any coco on the market with 40% air porosity rate. This reduces compaction, increases oxygen levels and increased drainage. This adds up to higher yields with greater consistency in finished product.

MOTHER EARTH LARGE & COARSE PERLITE

Item No.	Description	Bag Size	MSRP
713310	Mother Earth Perlite #3	4 cu ft	$25.95 - $38.95
713315	Mother Earth Perlite #4	4 cu ft	$27.95 - $40.95

Mother Earth Perlite #3

Mother Earth Perlite #4

Mother Earth Perlite is naturally occurring siliceous rock that when heated to 1600 F expands up to 20 times its original volume. This kilning process is very similar to popping popcorn and produces a growing medium that is sterile and has a neutral pH of 7.0. The exceptional physical properties of this giant perlite make it tops in the perlite world for adding porosity to soil and soilless mixes. This giant perlite also has numerous hydroponic applications as well. The #4 averages a whopping size of around 1" and the #3 measures around ½".

B'CUZZ® COCO

Item No.	Description	Bag Size	Bag lbs	MSRP
720389	B'Cuzz® Coco	50 Liter	50	$29.95 - $31.95

B'cuzz® Coco is the only coir product available through the retail hydroponics industry that undergoes a unique steaming and buffering process, resulting in an optimized, premium quality hydroponic growing medium. Atami has a partnership in Sri Lanka with a major coir producer. This means Atami has control over the quality of the raw coir that is used in its product. Age, origin, and the initial treatment are all important factors in determining the quality of the final product.

WIGGLE WORM SOIL BUILDER™ EARTH WORM CASTINGS 1 - 0 - 0

Item No.	Description	Bag Size	MSRP
720425	Soil Builder Earth Worm Castings	15 lb	$12.99 - $16.99
720430	Soil Builder Earth Worm Castings	30 lb	$14.99 - $24.99

ORGANIC

Wiggle Worm Soil Builder™ Earthworm Castings Organic Fertilizer is an all purpose natural fertilizer that comes to you straight from nature with no alterations whatsoever. Our nightcrawlers are fed a very rich peat humus which contains a wide variety of minerals and trace elements. The earthworms digest this material and in its' passage through the worm, it is beneficially altered both chemically and physically. The end product is "super humus" which is extremely fertile top soil properly conditioned for best root growth, containing in rich proportion and water soluble form, all the elements required for optimum plant nutrition.

HYDROTON® - GROWING PEBBLES

Item No.	Description	Bag Size	MSRP
714110	Hydroton® Growing Pebbles	10 liter	$9.99
714115	Hydroton® Growing Pebbles	25 liter	$25.95
714120	Hydroton® Growing Pebbles	50 liter	$40.95

NEW SIZE COMING SOON!

Compared to normal soil HYDROTON® offers many advantages. The material is not only completely clean and odorless, the ideal round shape. HYDROTON® ensures good root aeration, prevents rotting, prevents excess acidity and prevents soil pests. It is made of clay with high water storage properties and balanced capillary action to accelerate plant growth.

GENERAL HYDROPONICS®
Bringing Nature and Technology Together

COCOTEK® BALE ORGANIC GROWING MEDIUM

Item No.	Description	MSRP
714064	CocoTek® Bale - 5 kg	$11.00

ORGANIC

OMRI Listed™

CocoTek® is pH balanced and contains low sodium content for coir fiber. It increases water holding capacity and nutrient retention, expanding to 5 times it's condensed brick size. CocoTek® can be mixed with any other growing media. The "mixed" brick contains coconut chips, fiber and fine coir to increase the structure of the media.

COCOTEK® BRICKS & MATS ORGANIC GROWING MEDIUM

Item No.	Description	MSRP
714065	CocoTek® Bricks - Natural Coconut Coir Brick (expands to 3½ gal)	$2.38
714066	CocoTek® Bricks - Natural Mixed Brick (expands to 3½ gal)	$2.48
714200	CocoTek® Coco Mat 4' x 8' x ¼" Thick	$37.84
714201	CocoTek® Coco Mat 4' x 4' x 1" Thick	$58.30

ORGANIC

CocoTek® Grow mats are made from a strong weave containing 100% organic coconut fiber and natural rubber. Roots will thrive in this natural media. These mats can be easily cut to fit any size application and are designed to lay underneath baskets, slabs and cubes. Roots will grow under mats where moisture remains in a hydroponic tray between flood cycles protecting them from drying out.

GENERAL ORGANICS ANCIENT FOREST

Item No.	Description	Bag Size	Bag lbs	MSRP
720695	Ancient Forest West	.5 cu ft	19	$9.95
720695	Ancient Forest East	.5 cu ft	19	$15.95

ORGANIC

NEW!

Ancient Forest is a natural product consisting of 100% pure forest humus. It is derived from thousands of years of naturally decomposed forest litter that contains a wide spectrum of organic compounds. An incredibly high diversity of microorganisms, with more than 35,000 species of bacteria and over 5,000 species of fungi, make Ancient Forest an ideal amendment for gardening and potting soils. Ancient Forest also aids in the retention of water and nutrients; creating stable, long lasting soil for your garden. The immense biological activity also makes Ancient Forest the ideal inoculum for actively aerated compost teas.

FOXFARM SOIL & FERTILIZER COMPANY

ORIGINAL ORGANIC PLANTING MIX & LIGHT WARRIOR® GROW MEDIUM

Item No.	Description	Bag Size	Bag lbs	MSRP
714300	Original Planting Mix	1 cu ft	24	$15.95 - $23.95
714310	Light Warrior®	1 cu ft	11.5	$17.95 - $26.95

ORGANIC

A concentrated mix of organic and mineral components based around earthworm castings and bat guano. The finest planting medium for lush flower and vegetable gardens and is ready to use right out of the bag. A perfect, multi-purpose soil for all landscape plantings. Excellent for ornamental shrubs and conifers, Japanese Maples, and all fruit and shade trees. Planting Mix will not burn even the most delicate plantings.

Light Warrior® High Yield is specially designed to enhance root development and encourage greater nutrient uptake by the plants. It contains the powerful root stimulators mycorrhizae fungi and humic acid, biological catalysts that interact with micro nutrients to make them easily available to the plant. Our ultra premium blend has been pH adjusted to 6.3 - 6.8 to ensure optimum nutrient availability. Start feeding within five days of planting.

HAPPY FROG® SOIL

Item No.	Description	Bag Size	Bag lbs	MSRP
714303	Happy Frog® Soil	12 Qrt	14	$6.95 - $10.95
714302	Happy Frog® Soil	2 cu ft	52	$16.95-$25.95

ORGANIC

Your potted plants deserve the best. Their roots can't seek out nutrients in the ground, so you have to bring it to them. That's why Happy Frog® Potting Soil is alive with beneficial microbes and fungi that help break down organic matter and feed the plant roots. Between the earthworm castings, the bat guano, and the composted forest humus, your container plants have never felt so good.

OCEAN FOREST® ORGANIC POTTING SOIL MIX

Item No.	Description	Bag Size	Bag lbs	MSRP
714304	Ocean Forest® Potting Soil	12 Qrt	14	$6.95 - $10.95
714305	Ocean Forest® Potting Soil	1.5 cu ft	50	$16.95-$23.95

ORGANIC

A powerful blend of Northwest sea-going fish, crab and shrimp meal, and earthworm castings create an ideal indoor/outdoor, container and greenhouse soil. Composted forest humus, peat moss, bat guano and micronutrients are added to create the optimum organic medium for a versatile planting environment. It is light in texture and well aerated. Ocean Forest® starts seeds naturally so they can become strong vigorous plants! Ocean Forest® Organic Potting Soil- a premium blend of good things from the earth and sea. Ready to use for all container plantings!

FOXFARM BIG & CHUNKY PERLITE

Item No.	Description	Bag Size	MSRP
714330	FoxFarm Big & Chunky Perlite West	4 cu ft	$32.95
714330	FoxFarm Big & Chunky Perlite TN/PA	4 cu ft	$35.95
714330	FoxFarm Big & Chunky Perlite FL	4 cu ft	$37.95

FoxFarm Big and Chunky Perlite is the perfect medium for blending into containers and raised beds for increased drainage and aeration. These oversized perlite chunks help to distribute water and air evenly to plants so roots can thirve. It can also be used as a grow medium in hydroponic solutions. **Experiencing irregular availability.**

ROOTS ORGANICS SOILLESS COCO MIX

Item No.	Description	Bag Size	Bag lbs	MSRP
715165	Roots Organics Soilless Coco Mix	1.5 cu ft	31	$19.95 - $30.95

A unique formulation of the highest quality coco fiber/Coir on the planet which is repeatedly washed for an incredibly low EC, composted for over twenty-four months, and specially blended with extra long fibers, perlite, and pumice. Lightly amended with a starter charge of organic fertilizers like bat guano, worm castings and kelp, this mix is designed for heavy feeding and high performance in container or hydroponic applications. Coco fiber is a great medium and an excellent replacement for peat moss; it is an environmentally friendly by-product, pH stable within the ideal range for nutrient uptake, and because of the Lignin content is slow to decompose. Roots Organics Coco soilless mix was created for the gardener who demands higher performance from their plants.

ORGANIC

NATURAL & ORGANIC POTTING SOIL

Item No.	Description	Bag Size	Bag lbs	MSRP
715157	Roots Potting Soil	.75 cu ft	15.5	$9.95 - $14.95
715160	Roots Potting Soil	1.5 cu ft	34	$15.95 - $23.95

A truly exceptional ready-to-use coco fiber-based potting soil. We begin with a base of the highest quality coco fiber/Coir on the planet which is repeatedly washed for an incredibly low EC, and composted for over twenty-four months, and is specially blended with extra long fibers. This soil is amended with only the highest quality organic ingredients including bat guano, premium earth worm castings, fish bone meal, feather meal, green sand, mycorrihzae, glacial rock dust, soybean meal, humic acid, and many more. Already blended with correct proportions of perlite and pumice for excellent drainage and a vigorous root system, Roots Organics potting soil encourages healthier plants and better yields. Comes in a heavy-duty, ready-to-grow, 1.5 cu ft/10 gal, camouflage print bag; simply poke holes in the bottom, cut off the top, and plant.

ORGANIC

ROOTS ORGANIC GREENFIELDS POTTING SOIL

Item No.	Description	Bag Size	Bag lbs	MSRP
715170	Roots Organics Green Fields	1.5 cu ft	28	$15.95 - $23.95

Roots Organics Green Fields potting mix was created as a super premium planting mix. It was designed with a high nitrogen content and greater water holding capacity, less perlite and pumice, and specific ingredients for vigorously growing plants. Green Fields is an ideal mix for lush healthy plants in smaller containers or for that extra growth you need to maximize yields in large containers or holes. You can be assured that Aurora innovations has searched the world over and spared no expense to bring you only the finest quality, specially selected, organic ingredients like coarse peat, coco fiber, compost, perlite, pumice, worm castings, bat guano, fish meal, crab meal, fish bone meal, soybean meal, feather meal, kelp meal, glacial rock dust and mycorrhizae.

NEW!

ORGANIC

ROOTS ORGANIC FORMULA 707

Item No.	Description	Bag Size	Bag lbs	MSRP
715167	Roots Organics Formula 707 FL	3 cu ft	65	$23.95 - $39.95

Formula 707 was created for a special kind of gardener, one who wants to control their own destiny. Formula 707 is different from the other potting mixes created by Aurora Innovations. It was designed with greater water holding capacity, less perlite and pumice, and a light charge of nutrients for a good back bone but plenty of room for you to amend. It's base is peat moss, coco fiber, compost, perlite and pumice. The bag itself is a 30 gallon grow bag containing just less than 20 gallons of the finest quality potting mix. Just poke holes in the bottom, cut off the top and plant.

Roots Organics Formula 707 is a ready to use soil created for fast growing, heavy feeding plants. Most plants may benefit from additional fertilization. For exceptional results, feed with a high quality nutrient, such as the Roots Organics fertilizer line.

ORGANIC

ROOTS ORGANICS BIG WORM

Item No.	Description	Bag Size	Bag lbs	MSRP
715158	Roots Organics Big Worm FL	1 cu ft	35	$37.95 - $45.95

Roots Organics Premium Worm Castings is a distinctive natural soil amendment. Our worms are carefully tended and fed an unparalleled blend of organic compost, rock dust and kelp for exceptional quality castings. In addition to containing Nitrogen, our castings also contain small amounts of Phosphorus and Potassium with naturally occurring micronutrients, minerals and beneficial bacteria. Worm castings contain Auxins and Cytokines, which are growth hormones that promote bigger and more fibrous plant roots. No fillers, no chemicals and no tricks. Just pure worm castings.

ORGANIC

Premier Horticulture

PREMIER HORTICULTURE PRO-MIX 'BX'

Item No.	Description	Bag Size	MSRP
713400	Premier Horticulture Pro-Mix '**BX**'	3.8 cu ft	$40.95 - $46.95

NEW!

PRO-MIX 'BX'/MYCORISE® PRO is a "general purpose" peat-based growing medium with vermiculite and perlite, used for the cultivation of a wide variety of plant species. This complete mix is lightweight, uniform and blended to the highest degree of consistency to ensure maximum plant performance. MYCORISE® PRO ensures stronger, healthier plants due to more developed root systems and better fertilizer uptake.

- Canadian Sphagnum Peat Moss (80-85%/vol.).
- Endomycorrhize (Mycorise® PRO).
- Perlite - horticultural grade.
- Vermiculite.
- Dolomitic & Calcitic Limestone (pH adjuster).
- Macronutrients.
- Micronutrients.
- Wetting agent.

PREMIER HORTICULTURE PRO-MIX 'HP'

Item No.	Description	Bag Size	MSRP
713405	Premier Horticulture Pro-Mix '**HP**'	3.8 cu ft	$42.95 - $47.95

NEW!

PRO-MIX 'HP' is a "High Porosity" peat/perlite-based growing medium. This mix ensures optimum growth, especially when high air-capacity and extra drainage are required. It is ideal for water-sensitive crops, rooting cuttings and/or low-light growing conditions. MYCORISE® PRO ensures stronger, healthier plants due to more root systems and better fertilizer uptake.

- Canadian Sphagnum Peat Moss (70-75%/vol.).
- Endomycorrhize (Mycorise® PRO).
- Extra Perlite - horticultural coarse grade.
- Dolomitic & Calcitic Limestone (pH adjuster).
- Macronutrients.
- Micronutrients.
- Wetting agent.

BOSS™ PREMIUM SOILLESS ORGANIC GROW MEDIA

Item No.	Description	MSRP
720465	Boss™ 6" Cocogro™ cube	$3.95
720467	Boss™ 8" Cocogro™ cube	$4.75

Boss™ is eco-friendly and biodegradable. It is unique in its composition and is manufactured with extra washes to remove excess sodium. The fiber is aged 18 to 24 months and is fully decomposed to ensure no P.H. or E.C. drifts. Boss™ is exceptional because of its multi-drain capability. It contains a coarse coir fiber mat on the bottom of the block to allow for free drainage and to keep coir fiber particles from draining out of the bag. Boss™ is wrapped in a horticultural grade poly bag that is white on the outside and black on the inside to insure a low temperature and no light to promote healthy root systems.

COCOGRO™ PREMIUM ORGANIC SOILLESS GROW MEDIA

Item No.	Description	MSRP
720440	Cocogro™ Compressed Coir Fiber Bale 5 kg (70 liters hydrated)	$16.50
720445	Cocogro™ Compressed Brick Coir Fiber 650 g (8 liters hydrated)	$3.10

Cocogro™ has a very low salt content that is available in ¾'' double-sieved long fibers to reduce dust and give ample space within the mix. It has excellent drainage properties and can be used over a longer period of time than coir fiber with shorter fibers. With longer fibers and reduced dust, growers will experience an optimal air to water ratio, which is vital for strong root development.

Cocogro™ is a superior coir fiber because it is aged a minimum of 18 months and has finished its decomposition stage. In addition, Cocogro™ passes through at least three monsoon seasons, which naturally washes away harmful salts out of the final product.

BOTANICARE COCOGRO™

Item No.	Description	Bag Size	Bag lbs	MSRP
714810	Cocogro™ - Loose - West	1.5 cu ft	35	$18.00
714810	Cocogro™ - Loose - East	1.5 cu ft	35	$22.50

Cocogro™ is aged 18 to 24 months to avoid pH and nutrient imbalances. It has optimum air to water ratio with 30% air content. Cocogro™ is fully decomposed with stable pH & EC and is flushed of excess sodium. It is inoculated with Mychorrhizae and trichoderma fungi.

READYGRO™

Item No.	Description	Bag Size	Bag lbs	MSRP
714800	ReadyGro Aeration Formula™ - West	1.5 cu ft	37	$22.00
714800	ReadyGro Aeration Formula™ - East	1.5 cu ft	37	$25.00
714805	ReadyGro Moisture Formula™ - West	1.5 cu ft	40	$22.00
714805	ReadyGro Moisture Formula™ - East	1.5 cu ft	40	$25.00

ReadyGro Aeration Formula™ (4 to 6 waterings daily) is specifically designed for automated hydrogardens and self-watering planters with small to midsize plants. This blend is lighter and contains higher air content than the moisture formula.

ReadyGro Moisture Formula™ (1 to 2 waterings daily) is specifically designed for hand-watering, automated pots and planters with large plants. This formula contains more coir fiber and pumice stones. This formula will give plants enhanced moisture content for longer duration in between feeding and more pumice stones to help anchor large plants.

PURE EARTH™ ORGANIC BASED POTTING SOIL

Item No.	Description	Bag Size	Bag lbs	MSRP
714334	Pure Earth Indoor Aeration Formula - West	1.5 cu ft	30	$20.00
714334	Pure Earth Indoor Aeration Formula - East	1.5 cu ft	30	$23.00
714332	Pure Earth Outdoor Moisture Formula - West	1.5 cu ft	35	$20.00
714332	Pure Earth Outdoor Moisture Formula - East	1.5 cu ft	35	$23.00

ORGANIC

Pure Earth™ is blended using superior, and all natural ingredients, insuring that your plants receive the natural benefits that only organics can provide. Pure Earth™ is a premium, organic-based potting soil. The Indoor Aeration formula holds a higher oxygen content making this blend more suitable for indoor applications, automated gardens and hydroponic recirculating and run to waste gardens.

The Outdoor Moisture Formula holds a higher moisture content for hotter climates, outdoor application for less frequent waterings.

READYGRO™ GROW BAGS

NEW!

ReadyGro Aeration Formula™ now comes in an easy to use white grow bag. Two great sizes to choose from, 6" which is 3.5 liters and 8" which is 5.5 liters. No need to buy a separate pot. The bags even have pre-punched drainage holes

Item No.	Description	Bag lbs	MSRP
714770	ReadyGro Aeration 6" Grow Bag	2.5	$2.75
714772	ReadyGro Aeration 8" Grow Bag	5	$4.10

PURE EARTH™ GROW BAGS

NEW!

Pure Earth Aeration Formula™ now comes in an easy to use white grow bag. Two great sizes to choose from, 6" which is 3.5 liters and 8" which is 5.5 liters. No need to buy a separate pot. The bags even have pre-punched drainage holes

ORGANIC

Item No.	Description	Bag lbs	MSRP
714336	Pure Earth Aeration 6" Grow Bag	4	$2.75
714338	Pure Earth Aeration 8" Grow Bag	9	$4.10

JUST RIGHT XTRA POTTING MIX

Item No.	Description	Bag Size	MSRP
715240	Just Right Xtra Potting Mix	1.5 cu ft	$24.95 - $29.95

NEW!

Bags of Biology! Just Right Xtra was developed micro-bio-logically thru the use of a microscope. Just Right Extra is teaming with beneficial microbes, bacteria and fungi. Just Right Extra has gone well beyond the basic delivery of the traditional, essential, 19 major, minor, and micro elements found in most plant nutrient regimes. Just Right Extra delivers biodiversity and the importance of the 10's of thousands of biological species that our found naturally in pristine soil ecologies. This spectacular soil contains the best inputs General Hydroponics has to offer! Cocotek coconut coir, Ancient Biology Alaskan Forest Humus, Subculture M mycorhizae innoculant, Subculture B probiotic inoculum and Rare Earth prophylactic clay. This mix also contains the finest worm castings, natural organic potash and organic bone char. This mix has a perfect pH of 7.01 to keep the bacteria and fungi perfectly happy and healthy!

BLACK GOLD

All the riches of the earth™

BLACK GOLD® EARTHWORM CASTINGS

Item No.	Description	Bag Size	MSRP
714765	Black Gold® Worm Castings West	16 qt	$9.95 - $12.95

This all organic soil amendment is excellent for use as a top dressing, diluted to make a rich liquid "tea" or mixed with soil to stimulate plant growth. Black Gold® Earthworm Castings improves soil structure and increases microbial activity in a way that outperforms most commercial fertilizers. Minerals and nutrients from earthworm castings are in a water-soluble form, making them readily available to plants. Listed by the Organic Materials Review Institute (OMRI) for the production of organic food and fiber. Used as a top dressing, a "tea" or as an amendment in your soil.

ORGANIC

OMRI™ Listed

BLACK GOLD® ALL ORGANIC POTTING SOIL

Item No.	Description	Bag Size	MSRP
714750	Black Gold® All Organic Potting Soil	1.5 cu ft	$13.95 - $19.95

This rich, loamy mix is a premium choice for all-purpose gardening applications. Our 100% organic base, consists of screened earthworm castings, Canadian sphagnum peat moss, compost and forest humus. We blend in compost, forest humus and a specifically formulated organic fertilizer to increase the organic content. Perlite and pumice are added to ensure optimum aeration for sturdy growth. Listed by the Organic Materials Review Institute (OMRI) for organic production.

ORGANIC

OMRI™ Listed

BLACK GOLD® WATERHOLD COCOBLEND SOIL

Item No.	Description	Bag Size	MSRP
714754	Black Gold® Waterhold Cocoblend Soil	2 cu ft	$15.49 - $17.29

Formally known as Cocoblend, this product has a new name to better represent its usage. The combination of coconut fibers (coir) and Canadian sphagnum peat moss gives your outdoor container plants the advantage of water retention against constant exposure to heat, wind and sun. We add earthworm castings and pumice to make this a high-performance growing medium for all your gardening applications. Does not contain copolymer crystals (polyacrylamide), commonly found in other waterhold potting soils.

ORGANIC

OMRI™ Listed

BLACK GOLD® PERLITE

Item No.	Description	Bag Size	MSRP
714760	Black Gold® Perlite	12 qt	$6.95 - $9.95

As a soil amendment, Perlite (heat-expanded siliceous volcanic rock) is used to improve aeration and drainage. Its moisture and nutrient retention capabilities and lightweight characteristics make it an excellent sterile medium for starting seeds and rooting cuttings. Perlite does not degrade over time, which makes it a long-term solution to many gardening problems.

SUNSHINE®

SUNSHINE® MIX #4 - AGGREGATE MIX 4

Item No.	Description	Bag Size	MSRP
714745	Sunshine® Mix #4 - Aggregate Mix 4	3.8 cu ft	$43.95 - $49.95

Sun Gro Horticulture has long set the standard for the industry to follow in professionally formulated growing mixes. They formulate their mixes to give consistent results in every bag and bale. Mix #4 is recommended where high air capacity and fast drainage are needed with water and salt sensitive crops, or where frequent leaching is required. Ingredients: Canadian Sphagnum peat moss, coarse perlite, starter nutrient charge (with Gypsum), dolomitic limestone and long-lasting wetting agent.

SUNSHINE® GROWER'S ORGANIC BLEND

Item No.	Description	Bag Size	MSRP
714755	Sunshine® Grower's Organic	2.8 cu ft	$25.95 - $33.95

Developed in response to customer requests, this mix is formulated to help the professional organic grower cultivate strong, healthy crops. Listed by the Organic Materials Review Institute (OMRI) for the use in production of organic food and fiber, the OMRI Logo assures a product's compliance to OMRI's comprehensive product review process.

Grower's Organic is the choice of growers looking for high water holding capacity and increased bulk density. Best used in cell packs to 4 inch pots. Ingredients: Canadian Sphagnum peat moss (4.5-55%), coconut coir pith (25-35%), coarse perlite (5-15%), coarse vermiculite (5-15%), organic starter nutrient charge, Gypsum, Dolomitic limestone, an organic fertilizer and an organic wetting agent.

ORGANIC

OMRI™ Listed

SUNSHINE® PRO JUST COIR COCONUT FIBERS

Item No.	Description	Bag Size	MSRP
714756	Sunshine® Just Coir Coconut Fibers	2 cu ft	$17.29 - $20.95

Not all coconut fibers (coir) are alike. This coir has been carefully selected to provide the desirable horticultural characteristics hydroponic growers demand like reduced salts. The OMRI listed Just Coir is just that, a 2 cuft loose-fill bag of the best quality reconstituted coir available. Forget the bricks and bales – improve your quality of your growing mix with Sunshine Pro Just Coir.

ORGANIC

OMRI™ Listed

SUPER SPROUTER™ SEEDLING HEAT MAT

Item No.	Description	Dimensions	MSRP
726695	Super Sprouter™ Seedling Heat Mat	21" x 10"	$24.95

- Warms root area approximately 10° - 20° F over ambient temperature to improve germination process.
- Helps gardeners have better success rates with seedlings and cuttings.
- Perfect for one standard 10" x 20" propagation tray.
- Heavy-duty construction makes this mat very durable.
- More than 20% larger than competitive mats. This allows even warming of your entire tray.
- More consistent heating with fewer hot spots than other seedling heat mats.
- Ed Hume seal of approval.
- 20 watts.

SUPER SPROUTER™ 2 TRAY SEEDLING HEAT MAT DAISY-CHAINABLE

Item No.	Description	Dimensions	MSRP
726685	Super Sprouter™ 2 Tray Seedling Heat Mat Daisy-Chainable	12" x 48"	$46.95

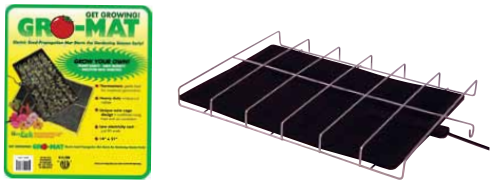
- Mat design allows placing propagation trays end to end (instead of side by side) on this mat. A 4' fluorescent light fixture will be perfect to provide supplemental lighting over this size area.
- Daisy chain your mats for ease of use. You can connect up to 10 mats together.
- 20% larger than competitive mats. This allows warming of 2 complete propagation trays to their edges.
- Warms rooting area approximately 10-20° F over ambient temperature to improve germination process.
- Helps gardeners have better success rates with seedlings and cuttings.
- Heavy–duty construction makes this mat very durable.
- Ed Hume Seal of Approval. • 60 watts.

SUPER SPROUTER™ SEEDLING HEAT MAT THERMOSTAT

Item No.	Description	MSRP
726702	Super Sprouter™ Seedling Heat Mat Thermostat	$34.95

This excellent quality, reliable thermostat is designed to be used with the Super Sprouter™ Seedling Heat Mat or any other heat mat. It's precise control allows the user to closely control mat temperature and easily dial in the ideal germination temperature. Easy to use - simply plug the mat into the thermostat then place the temperature probe into your soil or other growing media. 120V grounded plug. Rated to 300 watts.

GRO-MAT ELECTRIC SEED PROPAGATION MATS



Item No.	Description	Dimensions	MSRP
726235	Gro-Mat - Small	15 ¼" x 21"	$64.95
726230	Gro-Mat - Large	17" x 38"	$99.95

- Heavy-duty construction and superior design.
- Thermostatic controlled heating element gently heats soil for maximum seed germination.
- Low electricity cost, uses just 90 watts.
- Unique wire cage design combines rising heat and air circulation minimizes hot spots.
- Thick heavy-duty waterproof rubber. Much more heavy duty construction than most common brands!

FAST-GRO™ HEATING MATS

Item No.	Description	Dimensions	MSRP
726610	Fast-Gro™ Propagation Heat Mat	11" x 24"	$29.95
726615	Fast-Gro™ Propagation Heat Mat	22" x 44"	$66.95

Greenhouse tests have shown that identical plants, cared for in exactly the same way, will grow up to three times faster when their roots are kept warm. In fact, if the air temperature is as low as 50 degrees, plants without root zone heating don't grow at all while those that do have root zone heating continue to thrive and grow!

- Germinate seeds faster - ideal for starting seedlings!
- Grow plants up to 3 times faster!
- Keep soil temperature 15° to 20° above room temperature preventing root rot!
- Water resistant construction - spills just wipe off!
- Use with a thermostat.

SCALPEL

Item No.	Description	MSRP
728000	Scalpel	$2.95

Use this individually wrapped sterilized scalpel for all your plant cuttings. A sterile scalpel will help prevent disease and damage to any cutting.

RAPID ROOTER®

Item No.	Description	MSRP
714140	Rapid Rooter 50 Cell Plug Tray (plugs included)	$23.10
714135	Rapid Rooter 50 pack - Replacement Plugs	$15.95

Rapid Rooter® plugs are all natural soilless grow plugs made of composted tree bark and organic materials. These plugs are perfect for seedlings or cuttings. Transplant plugs in soil or soilless hydrogardening applications.

RAPID ROOTER™ MAT

Item No.	Description	MSRP
714137	Rapid Rooter™ Mat	$19.80

Rapid Rooter™ mat is a natural plant starters. It has 98 cross-cut planting sites that separate into one inch cubes for propagation cuttings and germinating seeds.

PLANTERS' PRIDE® GREENHOUSE KITS & PELLET REFILL KITS

Item No.	Description	MSRP
714250	20 Pellet Greenhouse Kit	$9.39
714255	50 Pellet Greenhouse Kit	$16.49
714252	20 Pellet Refill Kit	$6.59
714257	50 Pellet Refill Kit	$13.89
714258	1000 Pellet Refill Kit	$112.95

ORGANIC
COCONUT COIR

714250

714255

- These all purpose kits include: pellets, tray and greenhouse dome. Refill kits include pellets only.
- Fiber grow pellets are dried and compressed in a fine mesh netting.
- These pellets are 100% biodegradable.
- Pellets are universal, and fit in all Planters' Pride Fiber Grow Greenhouse Kits.

Fiber Grow is made from coir, a highly renewable resource. They offer all the benefits of peat without the harmful effects on the environment. In addition coir has the capacity to absorb more water, and retain it for longer periods than peat products. The mesh liner on Fiber Grow pellets is also made from natural ingredients, allowing it to break down into the soil unlike other comparable growing pellets.

714252

714257

714258

OASIS® HORTICUBES® RETAIL PACKS

Item No.	Description	MSRP
713720	Oasis Horticubes® 1 ¼" Retail Pack 2 sheets per box	$109.49/cs
713725	Oasis Horticubes® 1 ½" Retail Pack 2 sheets per box	$106.95/cs

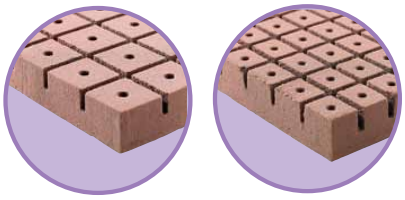
NEW!

Oasis Horticubes® Growing Media is a low density, high drainage foam with characteristics specifically developed for hydroponics seed germination and vegetative propagation of vegetables, herbs, flowers and foliage crops. These characteristics allow for an optimal balance of oxygen and water, even when saturated with water. Horticubes® are sold in sheets that fit into industry standard 10 x 20 Trays. These retail packs have 2 sheets of Horticubes® in one box.

OASIS® HORTICUBES®

Item No.	Description	MSRP
713700	Oasis 1 ½" Medium Cubes - 50/sheet (5015)	$149.95/cs
713705	Oasis 1 ¼" Medium Cubes - 104/sheet (5010)	$145.95/cs

HORTICUBES® Growing Medium offers a versatile system that has multiple applications for those crops that require high water usage. Hydroponic seed germination and foliage plant propagation are good examples. This medium is designed to drain off excess water from the base of the cutting or seed, yet provide for the proper balance of air/water needed for good root development. HORTICUBES are commonly used for hydroponic lettuce, tomato, herb, and onion seed germination.



OASIS® WEDGE® GROWING MEDIUM WITH TRAY

Item No.	Description	MSRP
713710	Oasis 102 Count Wedge Tray & Medium (5643)	$87.95

From Fuschias to New Guinea Impatiens, WEDGE® Growing Medium aids strong, fast root development of vegetative spring flowering plants. WEDGE® medium is ready and easy to use upon receipt, unlike other growing mediums. Save labor and time by going directly to water-in and stick. Due to the unique shape of the Wedge® Medium, transplanting of the rooted cuttings is made fast and easy. It also provides a safe, efficient system for the propagator/distributor when shipping on to other growers.

ROOT RIOT CUBES

Item No.	Description	MSRP
714130	Root Riot 50 Cube Tray with Clonex® Gel	$22.95
714132	Root Riot 100 Cubes	$24.95

Root Riot are organic plant starter cubes for cuttings and seeds for soil or hydroponics. Includes a free Clonex® Gel 15 ml packet. Made from organic material and are fully biodegradable. Root Riot will give you faster, more vigorous rooting. Perfect air/water capacity for healthy roots. New plants transfer easily into soil or any other media.

714132

714130

NGW® 2" PROPAGATION DOME

Shown with optional tray.

Item No.	Description	MSRP
726215	NGW® 2" Propagation Dome	$2.29

Excellent quality NGW® clear plastic dome fits standard 10" x 20" propagation flats. 2" tall.

NGW® 4" PROPAGATION DOME

Shown with optional tray.

Item No.	Description	MSRP
726239	NGW® 4" Propagation Dome	$4.49

This 4" tall heavy duty clear dome is perfect for medium sized starts and cuttings. Fits standard 10" x 20" propagation flats.

NGW® 7" PROPAGATION DOME & REPLACEMENT VENTS

Shown with optional tray.

726241

726243

Item No.	Description	MSRP
726241	NGW® 7" Propagation Dome with vents	$5.95
726243	Replacement Vents	.49¢

Excellent quality 7 inch tall propagation dome. Straight vertical sides allow use of all plant sites in a propagation tray. 2 clear vents in the top of the dome can be opened or closed to control humidity. Built in handle for easy removal. Fits snugly on a standard 10" x 20" propagation tray.

Use this to replace lost or broken vents on your NGW® propagation dome.

GROTEK™ SNUGFIT™ DOME - 6" TALL

Shown with optional tray.

Item No.	Description	MSRP
726242	6" SnugFit™ Dome	$5.49

Grotek Snugfit™ domes have been professionally engineered to provide a snug fit on any 10" x 20" propagation tray. A snug fit means less humidity escapes creating the optimal growth environment.

MONDI MINI GREENHOUSE 7" PROPAGATION DOME

Shown with optional tray.

NEW!

mondi™

Item No.	Description	MSRP
726140	Mondi 7" Propagation Dome	$5.95

A professional propagation dome for starting seeds or cuttings. Temperature and humidity controlled by two adjustable vents for better growing results. Designed to provide more cubic volume for your growing plants. Constructed from heavy duty, high grade plastic to maximize light penetration and stand up to repeated use. Perfectly fitted for standard 10 x 20 trays, to create a tight seal and reduce moisture loss.

MESH BOTTOM TRAY

Item No.	Description	MSRP
726160	10 x 20 Mesh Bottom Tray	$1.19

This mesh bottom plastic propagation tray can be inserted inside a standard 10 x 20 tray. Place your starter plugs (i.e. rockwool sheet of 98) inside the mesh bottom tray. Hand water your cuttings. The excess water will drain into the lower tray.

10 X 20 PROPAGATION TRAYS

726165

726167

Item No.	Description	MSRP
726165	10 x 20 Black Tray - No Holes	$1.39
726167	10 x 20 Black Tray - With Holes	$1.49

10" x 20" black plastic propagation trays with and without holes.

SEED CELL PLUG TRAY

Item No.	Description	MSRP
726220	10 x 20 Black Cell Tray - 72 count	$1.49

Fits snugly in a standard 10" x 20" propagation flat. Heavier duty than competitive inserts.

MONDI PROPAGATION TRAYS 10 X 20

Item No.	Description	MSRP
726150	Mondi Propagation Tray 10 x 20 - No Holes	$1.49
726155	Mondi Propagation Tray 10 x 20 - With Holes	$1.49

Deep, continuous channels and 'level fit' wide ridges prevent water pooling and provide better stability for propagation media. Super reinforced sides and lip with thick plastic and UV protection for durability and long life. Professionally engineered tray-ends add extra strength, making them easier to carry and move. Easy to nest and separate trays.

NEW!

mondi™

726150 726155

MONDI PROPAGATION TRAY INSERT 55-01

Item No.	Description	MSRP
726145	Mondi Propagation Tray Insert 55-01	$1.39

Insert 55-01 pellet pocket tray makes pellet expansion convenient and clean with even spacing and airflow for hassle free propagation. 55 propagation pellets fit snugly while maintaining excellent drainage through the large size holes. Thick plastic and UV protection for durability and long life.

mondi™

NEW!

PLANTERS' PRIDE® GEL2ROOT™

Item No.	Description	MSRP
714222	Gel2Root™ 6 pack	$19.49

The fun and easy way to start cuttings. Contains all the necessary ingredients for your plant cuttings to begin rooting - No need to water! Gel2Root™ is a non-toxic rooting gel that contains everything you need to start a cutting with no hassle, no mess and no worries. Clear containers allow you to see roots growing.

QUICK START PLUGS

Item No.	Description	MSRP
714275	1.5" x 1.5" Quick Start Plugs - 1500 pcs/cs	$319.95/cs

Quick start your seedlings and cuttings with the proprietary bonded Q plug. Plug dimension is 1 5/8" round by 1 5/8" deep and is bulk packaged in a 1500 count. Q plugs are stabilized to create the optimum growing media, creating a stronger root system and superior lateral root development. Q plugs provide insulation and natural buffering for more uniform growth. A plant is no better than it's roots.

READY GRO™ SUPER PLUGS

Item No.	Description	MSRP
714215	1.5" x 1.5" Ready Gro™ Super Plugs	$349.95

A sponge like material, all natural soilless grow plugs are made of composted tree bark and organic materials. Biodynamic plugs are perfect for seedlings or cuttings. Transplant plugs in soil or soilless hydrogardening applications. 1.5" x 1.5" size fits perfectly into rockwool holes. The plugs are made through an advanced proprietary composting method and contain natural beneficial fungi from this advanced composting biotechnology. Ready Gro™ Super plugs are biodegradable and 100% organic. Shipped in a poly bag inside a cardboard carton.

WHITE PLANT STAKE LABELS

Item No.	Description	MSRP
801000	White Stake Labels	$29.95

Use these white stake labels 4" x 5/8" to label your seeds or plants. Bundled in groups of 100.

POWER CLONE ROOTING GEL™ 0.1 - 0.1 - 0.1

Item No.	Description	Size	MSRP
726050	Power Clone Rooting Gel™	2 oz.	$13.95
726055	Power Clone Rooting Gel™	4 oz.	$21.50

For rapid, robust roots. Made for serious gardeners who prefer to use cuttings for propagating their favorite plants. Power Clone Rooting Gel™ was formulated utilizing the latest advances in plant molecular biology and DNA technology. Get a profusion of luxuriant roots from cuttings and best of all, the main ingredients are 100% natural. Can be used with all types of rooting media.

POWER CLONE ROOTING SOLUTION 0.2 - 0.3 - 0.2

Item No.	Description	Size	MSRP
726065	Power Clone Rooting Solution	4 oz.	$21.50
726070	Power Clone Rooting Solution	8 oz.	$27.50
726075	Power Clone Rooting Solution	Pint	$56.50
726080	Power Clone Rooting Solution	Quart	$102.50

Power Clone Liquid Concentrate™ for transplanting and rooting. Contains all of the ingredients found in Power Clone Rooting Gel™, however, it is formulated as a liquid. Although the Liquid Concentrate can be used as effectively as the Rooting Gel in all kinds of media, the liquid is most beneficial in aeroponic systems and for transplanting potted or bare-root plants. The powerful, all natural ingredients present in this product offer long-term protection against transplant shock.

REPLICATOR 0.015 - 0.070 - 0.020

Item No.	Description	Size	MSRP
726600	Replicator	2 oz.	$9.95

A great crop depends on great genetics. Don't jeopardise your next crop with poor cuttings. The main culprits of poor cuttings are harsh gels and air embolisms! REPLICATOR is a natural gentle gel that gives you the best success when taking cuttings.

REPLICATOR is a new and specialized cut stem sealant that nurtures your newly taken cutting in a revolutionary, protective and nutritious cocoon. This protective cocoon ensures trouble free and successful rooting by providing a specialized environment - bathing the cut end of the stem in a nutritious bath of selected mineral elements. Your cuttings are encouraged to produce roots naturally, not artificially with harsh hormones. The best cuttings and hence the best crops come when the plant is allowed to root naturally, not accelerated with a harsh hormone cocktail.

CLONEX® GEL & GEL PACKETS

726004

Item No.	Description	Size	MSRP
726004	Clonex® Gel Packets	15 ml	.28¢/ea
726005	Clonex® Gel	100 ml	$22.00
726010	Clonex® Gel	250 ml	$45.00

A thick gel which will remain in contact around the stem, sealing the cut tissue and supplying hormones needed to promote root cell development and vitamins to promote new root tissue. Clonex® has a full spectrum of primary nutrients and trace elements to nourish the young roots plus anti-microbial agents to protect against fungal contamination.

CLONEX® SOLUTION

Item No.	Description	Size	MSRP
726011	Clonex® Clone Solution	Quart	$23.00
726012	Clonex® Clone Solution	Gallon	$65.00

Clonex® Clone Solution is a clone-specific nutrient formulated using a special blend of minerals and other helpful ingredients. Used with Clonex® gel and other rooting agents, Clonex® Clone Solution assists in the cloning process while helping to minimize stress. Clonex® Clone Solution can be applied to the rooting medium and sprayed over the young clones.

HORMEX® CONCENTRATE

Item No.	Description	Size	MSRP
726620	Hormex® Concentrate	4 oz.	$7.95
726625	Hormex® Concentrate	8 oz.	$11.95
726630	Hormex® Concentrate	Pint	$14.99

A vitamin, hormone concentrate and root growth stimulant. Hormex® prevents transplant shock by stimulating growth of the small feeder roots, which become damaged during transplanting.

EZ-CLONE™ GEL

Item No.	Description	Size	MSRP
726650	EZ-Clone™ Gel	6 oz.	$34.95

EZ-Clone™ specially formulated gel is designed to speed up root development, produce vigorous healthy roots and protect the cutting from pathogens and contaminants. This unique formula was designed specifically for the EZ-Clone™ cloning systems, but can also be used for all other methods of cloning.

WOOD'S ROOTING COMPOUND

Item No.	Description	Size	MSRP
726560	Wood's Rooting Compound	4 oz.	$19.95
726565	Wood's Rooting Compound	16 oz.	$49.95
726570	Wood's Rooting Compound (SO)	Gallon	$225.95

Wood's Rooting Compound provides a safe, effective and inexpensive way for the professional and home grower to take advantage of rooting stimulants for plant propagation. This formula consists of approximately 10,000 parts per million of indole -3butyric acid, (IBA) and 5,000 parts per million of Napthalene acetic acid (NAA). Wood's utilizes a special ion-exchange formula that makes absorbtion into tissue instantaneous. Works on softwood, medium hardwood and hardwood cuttings. This compound is a soluble concentrate. **EPA registration No. 43905-1.**

VITA GROW™ ANTI-WILT PROPAGATION & TRANSPLANT SPRAY

Item No.	Description	Size	MSRP
726500	Anti-Wilt	4 oz.	$9.95
726505	Anti-Wilt	Pint	$26.95
726510	Anti-Wilt	Quart	$42.95

Tests show Vita Grow Anti-Wilt surpasses all other products in its class. Sold as a concentrate, this product should be diluted and sprayed onto the leaves of cuttings or newly transplanted starts. May also be used on Christmas wreaths to keep them fresh and smelling good. The very best you can buy! Goes a long way. Dilution rate is 7 parts water to 1 part concentrate. It may be used with the Vita Grow Rooting Compound for superior cloning.

VITA GROW™ ROOTING COMPOUND

Item No.	Description	Size	MSRP
726515	Rooting Compound	4 oz.	$12.95
726520	Rooting Compound	8 oz.	$19.95
726525	Rooting Compound	Pint	$31.95

Vita Grow Ready to Use Rooting Compound is a great product. This product works where others fail. This is the same formula that production nurseries use to clone ten thousand starts at a time. Nurseries don't have time for gels. They need rooting compounds to be effective, easy and fast or they won't use it. Simply dip the cutting into the compound for 5 seconds and plant in your favorite medium. Use a covered dome and under-tray heater for best results. **EPA registered No. 68719-2.** Not for sale in CA at the time of this catalog printing.

DIP'N GROW® ROOTING SOLUTION

Item No.	Description	Size	MSRP
726305	Dip'N Grow®	2 oz.	$10.95
726310	Dip'N Grow®	Pint	$53.95

Choice of professional plant propagators. Roots everything - from hardwoods to succulents. Cost effective solution for cuttings! **EPA registration No. 64388-1.**

ROOTECH CLONING GEL™

Item No.	Description	Size	MSRP
726704	Rootech Cloning Gel™	.25 oz.	$2.99
726705	Rootech Cloning Gel™	2 oz.	$17.09
726710	Rootech Cloning Gel™	4 oz.	$28.50
726715	Rootech Cloning Gel™	8 oz.	$47.04

Rootech Cloning Gel™ is an exceptional recipe containing a powerful hormone especially formulated to promote rapid, healthy root development during vegetative propagation. At application, Rootech's unique formulation surrounds the stem so it can be used immediately. Technaflora's original formulation is among the strongest cloning gels on the market, with a concentration of 0.55% (5.5 g/L) IBA.

HUMBOLDT ROOTS

Item No.	Description	Size	MSRP
723119	Humboldt Roots	50 ml	$22.00
723120	Humboldt Roots	125 ml	$42.00
723122	Humboldt Roots	250 ml	$70.00
723124	Humboldt Roots	500 ml	$115.00

Humboldt Roots is a highly concentrated organic root stimulant that expands the root zone during the critical growth stage. The soul of every plant resides in the roots. Many growers neglect this fact and concentrate on the visual aspects of their plants.

A large yield is directly related to a plants metabolism rates. The plant metabolism rates are directly related to the root zones capabilities to uptake nutrients and fertilizers. Humboldt Roots was specifically designed to expand the root zone which results in larger yields.

DYNA-GRO™ K-L-N CONCENTRATE™

Item No.	Description	Size	MSRP
726530	K-L-N Concentrate™	8 oz.	$9.95
726535	K-L-N Concentrate™	Quart	$30.95

K-L-N Concentrate™ is a rooting solution containing both IBA and NAA hormones to promote vigorous root growth in trees, foliage and flowering plants. Use it for propagating cuttings, air layering and as a transplanting drench for newly potted plants. Drench, dip or mist your plants to simulate new root growth. Growers highly recommend K-L-N to increase production of cuttings. Not for sale in CA at the time of this catalog printing.

OLIVIA'S - CLONING GEL®

A professional strength, easy/ready to use propagation gel. Just cut, clip and grow! Stimulates root development for all types of plants. Can be used for all stem, leaf, softwood, semi hard and some hardwood cuttings. Seals cutting and reduces transplant shock.

Item No.	Description	Size	MSRP
726330	Olivia's Cloning Gel®	2 oz.	$13.95
726335	Olivia's Cloning Gel®	4 oz.	$20.95
726340	Olivia's Cloning Gel®	8 oz.	$34.95

OLIVIA'S CLONING SOLUTION®

Item No.	Description	Size	MSRP
726345	Olivia's Cloning Solution®	Quarts	$12.95
726350	Olivia's Cloning Solution®	Gallon	$34.95

This cloning solution is a nutrient and propagation liquid that promotes vigorous growth and rapid root development for all types of plants, flowers, fruits and vegetables. Mixing ratio is 6 oz. to 1 Gallon of water.

SEEDS of CHANGE™ CERTIFIED ORGANIC — Goodness from the Ground Up™

SEEDS OF CHANGE SEEDS

Item No.	Description	MSRP
720800	BASIL, Genovese Sweet	$3.29
720801	MESCLUN SALAD MIX	$3.29
720802	CILANTRO, Slow Bolt	$3.29
720803	ARUGULA	$3.29
720804	SPINACH, America	$3.29
720807	PARSLEY, Italian Flat Leaf	$3.29
720810	ECHINACEA, Purpurpea Purple	$3.29
720813	CUCUMBER, Sweet Marketmore	$3.29
720814	CHIVES, Garden	$3.29
720816	CHAMOMILE, German	$3.29
720819	CHARD, Rhubarb	$3.29
720825	THYME, English	$3.29
720826	LETTUCE, Butterhead Buttercrunch	$3.29
720827	DILL, Dukat	$3.29
720828	TOMATO, Purple/Pink Brandywine	$3.29
720830	PARSLEY, Forest Green	$3.29
720833	CATNIP	$3.29
720834	BROCCOLI, Nutribud	$3.29
720842	ZINNIA, Pastel Dreams	$3.29
720843	TOMATO, Cherry Peacevine	$3.29
720847	NICOTIANA, Aztec Jasmine Scented	$3.29
720848	MINT, Dotted	$3.29
720849	LETTUCE, Romaine, Rubens Red	$3.29
720853	PEPPER, Chile Jalapeno	$3.29
720856	LETTUCE, Leaf Red Oak	$3.29
720865	BASIL, Lemon	$3.29
720877	PEPPER, Sweet Bell California Wonder	$3.29
720876	TOMATO, Cherry Yellow Pear	$3.29
720916	SYLVESTRIS NICOTIANA	$3.29

ORGANIC

USDA ORGANIC

Seeds of Change

Currently offer over 600 distinct varieties of 100% organically grown seeds for the home gardener and commercial grower. NGW® has hand selected the top varieties to stock that we believe are conducive to indoor, outdoor and hydroponic gardening. All other Seeds of Change varieties are available special order. Many varieties represent decades, even centuries, of cultures from around the world who have saved their favorite, most flavorful and nutritious plants. Conserving this invaluable genetic resource, while contributing to the knowledge of sustainable organic agriculture and gardening techniques, is central to the mission of Seeds of Change.

All Seeds Are 100% Certified Organic

All seeds are certified organically grown in accordance with the National Organic Standards and meet or exceed Federal germination requirements. Oregon Tilth is the certifying agent who states that we have complied with the Organic Foods Production Act of 1990 and the applicable organic production and handling standards established by the USDA National Organic Program.

Seeds of Change is committed to safeguarding your health and that of the planet. Organic, sustainable agriculture produces healthy soils, naturally rich and balanced in the nutrients plants need. That's why they grow 100% of our seeds organically on our own certified organic research facilities and through our unique network of certified organic family farms.

AEROGARDEN® PRO 100

Item No.	Description	MSRP
707455	AeroGarden™ with Gourmet Herbs - Pro 100	$229.95

More food, faster. Our current system regulates nutrients and light to optimize growth for each specific plant type. AeroGrow's Pro 100 uses computerized Adaptive Growth Technology to continuously monitor plant growth and instantly adjust the nutrients, light cycle and water flow to give plants exactly what's needed at each stage of growth – for earlier harvests and up to 50% more food. From germination, to initial growth to advanced growth, we are delivering just what the plant needs, just at the right time. As a result, we can speed up the growth of leafy greens in your AeroGarden® Pro 100. In addition, since grow lights lose power over time before they actually burn out, it is important to replace your bulbs every 6 months. The Pro 100 includes a Grow Light Replacement System, to automatically remind consumers when it is time to replace the lights for continued optimum plant health and growth. The Pro 100 Super Grow 24 hour light cycle lets the experienced gardener override the built in timer, which is maximized at 17 hours of light, to provide more light. This expands the possibilities for gardeners who may want to plant their owns seeds in conjunction with our Master Gardener Deluxe Kit. Unit Dimensions: 21" H x 14" W x 10" D.

AEROGARDEN DELUXE™

Item No.	Description	MSRP
707565	AeroGarden Deluxe™ - Black	$249.95
707570	AeroGarden Deluxe™ - White	$249.95

AeroGrow's newest AeroGarden® technology delivers faster and larger harvests with twice the light intensity and twice the extension on the lamp arm for growing full-sized tomatoes, cucumbers, bell peppers and more. It is the perfect companion to a Master Gardener Deluxe Kit (included) which lets consumers grow their own seeds, but will also work with all the AeroGarden™ Seed Kits. New electronics provide a 24-hour light option and grow bulb replacement indicator. Available in Black or White and includes a Master Gardener Deluxe Kit for planting and growing a garden of your choice. Unit Dimensions: 32" H x 14" W x 10" D.

For product warranty issues or questions please call direct at 1-800-GROWNOW.

Aerogarden® one year limited manufacturers warranty. • Aerogarden™ Lamps 6 month limited manufacturers warranty.

AEROGARDEN™ NUTRIENT TABLETS

Item No.	Description	MSRP
707540	AeroGarden™ Salad Nutrient Tablets - 12 per box	$19.95
707545	AeroGarden™ Herb Nutrient Tablets - 12 per box	$19.95
707550	AeroGarden™ Extended Season Nutrient (for flowers) 12/box	$19.95
707551	AeroGarden™ Extended Season Nutrient (for vegetables) 12/box	$19.95

Extend the life of your seed kit.

AEROGARDEN REPLACEMENT BULBS

Item No.	Description	MSRP
707575	AeroGarden Deluxe™ Flat Replacement Bulbs- 3 per box	$29.95/box
706911	AeroGarden™ Standard Replacement Bulbs (26 Watt) - 2 per box	$29.95/box

AEROGARDEN® CLASSIC

Item No.	Description	MSRP
706900	AeroGarden Classic with Gourmet Herbs - White	$199.95
706901	AeroGarden Classic with Gourmet Herbs - Black	$199.95
707450	AeroGarden Classic with Gourmet Herbs - Silver	$199.95

Imagine fresh herbs right at your fingertips all year round for making all your meals come to life. The AeroGarden grows delicious fresh herbs, vegetables, tomatoes, salad greens and more, right on your kitchen counter, with no dirt, no mess, and no green thumb needed. Just drop in one of the pre-seeded grow pods (included), add water and the included pure, organic-based nutrients and your ready to grow. The AeroGarden tells you when to add water and nutrients and turn the lights on and off automatically to maximize growth – more than twice as fast as plants grown in soil. Free Gourmet Herbs seed kit included – grows up to 5 months of herbs fresh in your kitchen! Unit Dimensions: 21" H x 18" W x 10.5" D

AeroGarden® Classic Silver AeroGarden® Classic Black AeroGarden® Classic White

AEROGARDEN DELUXE™ UPGRADE KIT

Item No.	Description	MSRP
707566	AeroGarden Deluxe™ Upgrade Kit - Black	$129.95
707571	AeroGarden Deluxe™ Upgrade Kit - White	$129.95

Upgrade your standard AeroGarden® with this kit. The AeroGarden Deluxe™ Upgrade Kit has the newest AeroGarden® technology which delivers faster and larger harvests with twice the light intensity and twice the extension on the lamp arm for growing full-sized tomatoes, cucumbers, bell peppers and more. The kit includes lamp arm, three flat bulbs and the hood.

MASTER GARDENER DELUXE SEED KIT

Item No.	Description	MSRP
707460	Master Gardener Deluxe Seed Kit	$49.95

The Master Gardener Deluxe Kit lets you plant and grow your own favorite seeds in the AeroGarden™, from green beans, to spinach to wildflowers and more. Specially designed reusable split-apart baskets allow for easy transplanting into soil so you can also start seeds indoors in spring and transplant plants to your outdoor garden. Includes:

- Everything needed for a full year of growing, just add seeds
- A step-by-step planting & growing guide
- 7 Bio-Domes™
- 21 Seed pod labels
- 21 Grow sponges
- 7 Split-apart baskets
- A year's supply of small and large nutrient tablets

AEROGARDEN™ GARDEN STARTER TRAY

AeroGarden® sold separately

Item No.	Description	MSRP
707580	Garden Starter Tray	$39.95
707585	70 Garden Starter Replacement Plugs	$29.95

The Garden Starter Tray is a fast, easy, clean and foolproof seed starter that allows gardeners to get a jump on the outdoor growing season. Start up to 70 seedlings indoors in an AeroGarden™ with no dirt and no mess, then easily transplant them into the outdoor garden when weather allows. The specially designed tray uses biodegradable, nutrient-rich Grow Pods for starting seeds and fits into any standard or Pro 100 AeroGarden to provide just the right amount of light, water and nutrients for fast germination and healthy root development. Seedlings are ready to transplant to outdoor gardens or containers in only 2 to 6 weeks. Includes nutrients for a full set of seedlings.

AEROGARDEN™ SEED KITS

Item No.	Description	MSRP
706902	Gourmet Herb Seed Kit	$29.95
706903	Cherry Tomato Seed Kit	$29.95
706905	Cascading Petunia Flowers Seed Kit	$29.95
706906	Chili Peppers seed Kit	$29.95
706907	International Basil Seed Kit	$29.95
706909	Italian Herb Seed Kit	$29.95
707465	Salsa Garden Seed Kit	$29.95

Nutrient tablets included in each seed kit.

The Gourmet Herb Kit contains Thyme, Chives, Italian Basil, Purple Basil, Dill, Mint and Parsley.

Cherry Tomato seed kit has 2 Red Heirloom and 1 Golden Harvest cherry tomato plants bursting with flavor and color.

The Cascading Petunias has a season full of multi-colored petunias.

3 pepper varieties are included in the Chili Pepper kit for a full range of chili hot to spice up your cooking. Includes 2 Jalapeño, 2 Red Fire and 3 Purple Super Hot.

The International Basil kit has 7 varieties of basil which include Lemon, Thai, Napolitano, Marseilles (French), Genovese (Italian), Globe, Red Rubin.

Bring the familiar flavors of Italy right to your home with the Italian Herb kit. Herbs included are Mint, Basil, Savory, Italian Parsley, Garlic Chives, Oregano and Chives.

Salsa Garden Seed Kit includes everything you need to make your own salsa. The kit includes 2 Red Cherry Tomato seed pods and 1 jalapeño pepper seed pod.

SALAD BAR SERIES™ SEED KITS & VEG-E-GARDEN SEED KIT

Item No.	Description	MSRP
706904	Salad Bar Series™ - Salad Greens	$29.95
707480	Salad Bar Series™ - Romaine	$29.95
707495	Green Beans Seed Kit	$29.95

The Salad Greens kit includes seed pods mixed with Red Leaf Lettuce, Green Leaf Lettuce, Butterhead and Romaine lettuces.
The Romaine kit includes red and green varieties that offer crispy texture and mouthful of flavor.
The Green Bean Seed Kit comes with 7 seed pods and 18" rubber-coated wires for plant support.

Nutrient tablets included in each seed kit.

AEROGARDEN™ CHEF PACK SEED KITS

Item No.	Description	MSRP
707510	Salad Chef Pack Seed Kit	$59.95
707515	Herb Chef Pack Seed Kit	$59.95

Nutrient tablets included in each seed kit.

Salad Chef Pack has 14 salad seed pods with 5 different mixes including: 3 Salad greens, 3 Mesclun mix, 3 Romaine mix, 3 Arugula, 2 Baby greens

Herb Chef Pack has 14 herb seed pods and plant nutrient for 2 full growing seasons. The kit includes Genovese Basil, Thyme, Chives, Oregano, Thyme, Sage, Parsley, Red Rubin Basil, Dill, Mint, Savory, Napolitano Basil, Lemon Basil and Epazote.

AEROGARDEN™ HERB 'N SERVE HERB CHOPPER

Item No.	Description	MSRP
707560	Herb 'n Serve Herb Chopper	$29.95

The perfect companion to the abundant fresh herb harvests from your AeroGarden. Just add oil and vinegar to premeasured markings on carafe and a handful of freshly harvested herbs for garden-fresh vinaigrettes and marinades.

Serve them tableside in the detachable carafe. Includes detailed instruction manual with photos and 20 recipes for salad dressings and marinades; guidelines to help you invent your own recipes; stainless steel mixing blade. Battery operated, use–anywhere convenience. Batteries included.

AEROGARDEN™ WALL GARDENS

Item No.	Description	MSRP
707520	Wall Garden 1 shelf garden	$59.95
707525	Wall Garden 3 shelf garden	$129.95

1-Shelf: Silver, made of metal. The Wall Garden lets you elegantly mount your AeroGarden on the wall, saving space on the counter. Adds beautiful, fragrant, "living art" to any décor. Dimensions: 23" high x 15.75" wide x 15.5" deep

3-Shelf: Silver, made of metal. The Wall Garden is a 3-shelf unit designed to free up counter space while growing 3 AeroGardens vertically. Can also be used as a 2-shelf Wall Garden. Attractive silver finish includes hidden power strip and hardware for mounting to the wall. Easy to assemble. Dimensions: 71" high x 15.75" wide x 15.5" deep.

RESCUE TAPE

Item No.	Description	MSRP
380110	Rescue Tape 1" x 12' Black	$10.50
380115	Rescue Tape 1" x 12' Clear	$10.50

NEW!

- Rescue Tape is the ultimate multi-purpose self-fusing repair tape.
- Incredible 950 PSI tensile strength.
- Insulates 8,000 volts per layer.
- Withstands 500° F degrees of heat.
- Remains flexible to - 85° F (-60° C).
- Creates a permanent air-tight, Water-tight seal in seconds.
- Never gets gummy or sticky.

Solar Flare 412 in 4 x 4 Sun Hut over a Botanicare 4 x 4 tray.

SUN HUT

SILVER INTERIOR IS 30% MORE REFLECTIVE THAN WHITE PLASTIC INTERIOR

SUN HUT™ ENCLOSED GREENHOUSES

Item No.	Description	L x W x D	MSRP
706800	Sun Hut™ Silver LG	2′ x 4′ x 7′	$207.95
706805	Sun Hut™ Silver XL	4′ x 4′ x 7′	$239.95
706810	Sun Hut™ Silver XXL	4′ x 8′ x 7′	$441.95

- No toxicity issues for your plants.
- Larger than competitive huts to accommodate Botanicare® 2′ x 4′, 4′ X 4′ & 4′ X 8′ trays or other growing systems.
- Thick black canvas exterior.
- 2 - 6″ duct flanges included.
- Venting and cord holes offer sleeves with draw strings to seal the exit ports around ducting and cords.
- 4′ x 8′ Sun Hut™ has a removable divider wall in the middle.
- Highly reflective silver interior.
- Heavy-duty zippers.
- Metal framing is made of strong and durable steel tubing.
- 4′ x 4′ and 4′ x 8′ models have zippered doors in the back for easy access on both sides of the Sun Hut™.
- Bracket to support exhaust fan and filter.
- Actual interior dimensions:
  2′ x 4′: 54" x 35½" x 84"
  4′ x 4′: 54" x 54" x 84"
  4′ x 8′: 112″ x 57″ x 84"

GROW LABS

Item No.	Description	L x W x D	MSRP
706820	GrowLab 40	1'4" x 1'4" x 3'11"	$89.99
706825	GrowLab 60	2' x 2' x 5'3"	$134.99
706830	GrowLab 80	2'7" x 2'7" x 5'11"	$189.99
706835	GrowLab 120	3'11" x 3'11" x 6'7"	$259.99
706845	GrowLab 145	4'9" x 4'9" x 6'7"	$339.99
706850	GrowLab 240	7'11" x 7'11" x 6'7"	$729.99
706855	GrowLab 290	9'6" x 9'6" x 6'7"	$919.99
706860	GrowLab 80L	4'11" x 2'7" x 6'7"	$269.99
706865	GrowLab 120L	7'11" x 3'11" x 6'7"	$459.99
706880	GrowLab 145L	9'6" x 4'9" x 6'7"	$655.99
706885	GrowLab Clone Lab	4'1" x 2'1" x 3'11"	$289.99

The GrowLab Horticultural Grow Room has all the features you could ask for - and more! Outfit the GrowLab with the ventilation fan, lighting system and growing system of your choice and you will have the brightest, slickest, most affordable grow room available. Introducing the next generation in portable grow rooms - The GrowLab Horticultural Grow Room.

Here are just some of the unique and exciting features you won't find elsewhere:

- Clear viewing windows! - on all models except GL40, GL60, GL240 & GL290.
- Increased weight capacity - roof cross-members easily support 100 pounds.
- Sturdy powder coated framework - helps protect against rust and gives a cleaner look; thicker than previous models.
- Highly reflective interior - significant increase in reflectivity for improved lighting performance.
- Thermally protected - tent material reflects 97% of all radiant heat for superior insulation.
- Completely non-toxic - will not react under light and heat, and no off-gassing to harm plants.
- Improved fabric & zippers - thicker fabric than previous models, with the best zippers on the market.
- Moveable roof cross-members - easily adjust lighting and accessories; pieces snap into desired place for better functionality.
- Multiple intake/exhaust ports - including two ports opposite each other at reflector level for air-cooling of lighting system on most models.
- Adjustable fan and ducting attachments - no more clamps or reducers needed!
- Waterproof floor - a second floor that is removable for easy cleaning between crops.

706830

706835

706845

706880

706885

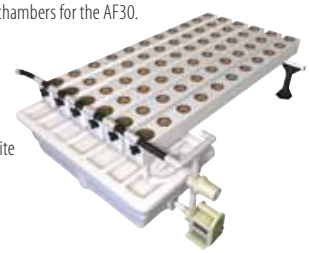
GROWLAB HORTICULTURAL

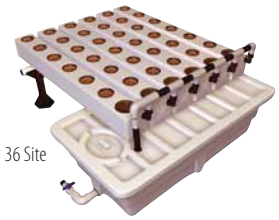
GrowLAB Portable Grow Rooms	GL40	GL60	GL80	GL120	GL145	GL80L	GL120L	GL145L	GL240	GL290	GL CloneLAB	DryNet
	standard					wide			xxxl		other	
size assembled (ft): length x width x height	1'4" x 1'4" x 3'11"	2'0" x 2'0" x 5'3"	2'7" x 2'7" x 5'11"	3'11" x 3'11" x 6'7"	4'9" x 4'9" x 6'7"	2'7" x 4'11" x 6'7"	3'11" x 7'11" x 6'7"	4'9" x 5'6" x 6'7"	7'11" x 7'11" x 6'7"	9'6" x 9'6" x 6'7"	2'1" x 4'1" x 3'11"	2'11" x 2'11" x 5'11"
size assembled (cm):	40 x 40 x 120	60 x 60 x 160	80 x 80 x 180	120 x 120 x 200	145 x 145 x 200	80 x 150 x 200	120 x 240 x 200	145 x 290 x 200	240 x 240 x 200	290 x 290 x 200	65 x 125 x 120	90 x 90 x 180
size packaged (ft):	2' x 0.9' x 0.4'	2.7' x 0.9' x 0.4'	3' x 1' x 0.4'	4' x 1.2' x 0.4'	4.9' x 1.2' x 0.4'	5' x 1.1' x 0.3'	6' x 1.3' x 0.5'	4.9' x 1.3' x 0.5'	6' x 1.4' x 0.6'	4.9' x 1.4' x 0.6'	4.2' x 2.2' x 0.5'	1.1' x 1.1' x 0.3'
unit weight:	12 lbs	17 lbs	22 lbs	31 lbs	35 lbs	32 lbs	50 lbs	59 lbs	73 lbs	89 lbs	40 lbs	4 lbs
square footage:	1.7	3.9	6.9	15.5	22.6	12.9	31	45.3	62	90.5	8.7	6.8 x 6 Levels
cubic feet:	6.8	20.3	40.7	101.7	148.5	84.8	203.4	297	406.8	594	34.4	N/A
hangable weight:	100+ lbs	100+ lbs	100+ lbs	100+ lbs	100+ lbs	100+ lbs	100+ lbs	100+ lbs	100+ lbs	100+ lbs	150 lbs per shelf	3 lbs per level
viewing windows:	-	-	YES	YES	YES	YES	YES	YES	-	-	-	N/A
reducing roof port:	5"	5"	5"	8"	8"	8"	10"	10"	10"	10"	6"	N/A
reducing upper port:	-	-	-	8" left/right	8" left/right	8" left/right	8" left/right	8" left/right	8" left/right	8" left/right	-	N/A
reducing lower port:	-	5" left/right	5" left/right	8" left/right	8" left/right	8" left/right	10" left/right	10" left/right	10" left/right	10" left/right	6" left/right	N/A
reducing cable port:	4" top/bottom	4" top/bottom	4" top/bottom	4" top/bottom	4" top/bottom	4" top/bottom	4" top/bottom	4" TR/TL/BL/BR	4" TR/TL/BL/BR	4" TR/TL/BL/BR	4" top/bottom	N/A
intake flap:	2 left/right	3 left/right/back	3 left/right/back	3 left/right/back	3 left/right/back	3 left/right/back	4 left/right/back/back	4 left/right/back/back	4 left/right/back/back	4 left/right/back/back	3 left/right/back	N/A
access panels:	-	-	-	-	-	-	rear	rear	left, right, rear	left, right, rear	-	N/A
floor panels: (waterproof)	1	1	1	1	1	1	1	1	1	1	1	N/A
fits DryNet:	-	-	-	YES	YES	2x	2x	2x	4x	4x	-	N/A
sugg. wattage:	CFL	CFL/T5	250 - 400	400 - 600	1000	2x 400	2x 600	2x 1000	4x 600	4x 1000	T5	N/A

AEROFLO²® SYSTEMS

Hydroponic systems come complete with everything needed to start growing - Flora Series™ nutrients, Hydroton®, net cups, coco cup liners, pump (except 60 extension), support structure and manifold. Legendary growth and yield are the hallmarks of the AeroFlo2® line. AeroFlo2® super-oxygenates the nutrient solution to deliver oxygen, water and nutrient in ideal combinations, creating a root zone environment that surpasses anything found in nature. The results are larger yields, stronger more resistant plants. The AF18 and AF30 both use our new WaterPower pump and 17 gal Hex Pot Reservoir. More nutrient, less nutrient maintenance. 4 foot chambers for the AF18 and 6 foot chambers for the AF30.

Item No.	Description	Outside L x W x D	MSRP
706028	AeroFlo²® 18 site	62" X 23" X 22"	$429.00
706030	AeroFlo²® 20 site	83.5" x 17" x 18"	$421.67
706035	AeroFlo²® 30 site	88" x 23" x 22"	$559.98
706040	AeroFlo²® 36 site	58" x 51" x 18"	$937.74
706045	AeroFlo²® 60 site	83.5" x 66" x 18"	$1,173.33
706050	AeroFlo²® 60 site extension (no pump)	83.5" x 66" x 18"	$935.00


60 Site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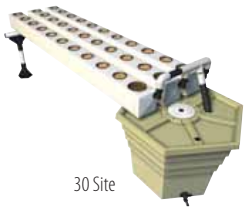
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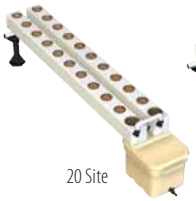
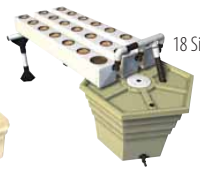

20 Site


18 Site

AEROFLO²® REPLACEMENT PARTS

Item No.	Description	MSRP
706005	6 Foot Laser Drilled Spray line	$10.29
708325	1" Grommet for AeroFlo spray line	$1.90
708330	1¼" Grommet for AeroFlo chamber drain	$2.20
706832	3" Site Plug	$1.07/ea
706833	4" Site Plug	$2.13/ea

WATER FARM® - COMPLETE & MODULAR SYSTEMS

Item No.	Description	Outside L x W x D	MSRP
706975	Water Farm® complete	9" x 9" x 15"	$65.63
706985	Water Farm® module	9" x 9" x 15"	$46.00

This extremely reliable system has proven itself over the last 25 years! Grow one large plant or up to five small ones. It increases oxygen to the roots for vigorous growth and healthier plants. The WaterFarm comes in two forms, complete and modular. The complete WaterFarm is designed to be a stand alone system and includes 4-gallon reservoir, 2-gallon growing chamber, pumping column, column support tube, drip ring, 1/2" grommet, drain level tube, elite® 800 air pump, 9L Hydroton® and 3-part Flora Kit. The modular unit comes without a Drain Level Tube, Elite air pump, Hydroton®, or Flora kit, as it is designed to use with a General Hydroponics controller supplying multiple WaterFarm units.

WATERFARM 8 PACK CIRCULATING UPGRADE KIT & FARM KIT

Item No.	Description	MSRP
706335	Farm Kit - 10 Kits Per Case	$14.30
706976	Water Farm® 8 pack Circulating Upgrade Kit	$49.50

706976

706335

Plumbing hardware for Water Farm. Kit includes drip ring, pumping column, drain level tube and clip, clear air hose, and grommet. Also includes the Water Farm Module.

The WaterFarm 8 Pack Circulating Upgrade Kit contains everything needed to reconfigure an 8 Pack and add nutrient circulation capability to an existing system. This promotes even growth and more consistent results overall. Kit Includes: 1/4" Drill bit

- 9 1/2" Grommets
- 15 1/2" Straight Barbed Fittings
- 4 1/2" Elbow Barbed Fittings
- Blue Tubing 1/2" x 8'
- Blue Tubing 1/2" x 9'
- Circulating pumping column
- Air Hose 1/4" x 6'
- Single Output Air Pump
- 13/16" Spade bit

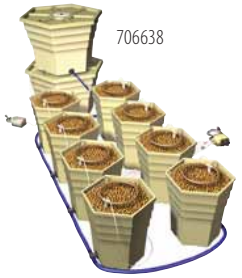
EUROGROWER® - COMPLETE SYSTEM

Item No.	Description	Outside L x W x D	MSRP
706636	EuroGrower® 8 (complete)	54" x 26" x 22"	$616.66

The new EuroGrower® is the ideal system for someone new to gardening. The EuroGrower® provides users with a simple, yet elegant approach to home hydroponics. The heart of the EuroGrower® is our custom designed 40-gallon Panda reservoir, which is more than adequate for its eight 2-gallon buckets. You can grow either numerous small plants or 1 large one in each of the 2 gallon capacity buckets. Whether using a soil or soil-less medium, growers can use the EuroGrower® virtually anywhere. The EuroGrower® comes complete with a 40-gallon Panda® reservoir, 8 buckets, 250gph Mag-Drive® 2, CocoTek bricks, Hydroton®, pH kit, Grasslin timer and 3-part Flora Series nutrients.

WATER FARM® - 8 PACK KIT & POWERGROWER - 8 PACK KIT

Item No.	Description	Outside L x W x D	MSRP
706980	Water Farm® 8 pack	79" x 30" x 15"	$514.60
706638	Power Grower 8 pack	79" x 48" x 15"	$687.48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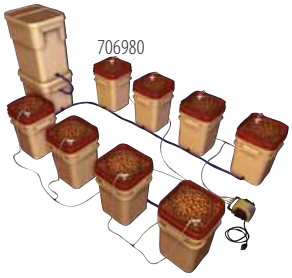

706980

The WaterFarm 8-pack is eight WaterFarm module units connected to one Controller: and integrated 13 gallon reservoir and an 8 gallon controller unit. The Controller will keep each unit topped off with the correct level of nutrient for low maintenance. The kit is powered by GH's Dual Diaphragm Air Pump, and includes all the necessary hardware, supplies and Flora Series nutrients. The grower can arrange the WaterFarm units in a design that is suitable for any environment. This system does not include Hydroton®.

The Power Grower 8 pack hydroponic system features 8 of the 5.7 gallon hex reservoirs with 3 gallon growing chambers, 17 gallon master reservoir, 17 gallon controller with float valve, tubing, fittings, drip rings and GH Flora nutrients. Does not include Hydroton®.

VORTEX® DC SPRAYER

Item No.	Description	MSRP
706720	Vortex® 12 Volt DC Sprayer	$129.99

The spinning shaft of the Vortex® Sprayer creates a powerful eddy that not only stirs and lifts nutrients from the reservoir, but also gently oxygenates and evenly distributes nutrients and oxygen to plant cuttings and root systems. This powerful system enables faster, more consistent propagation creating higher crop yields.

CONTROLLER COMPLETE & TEXAS CONTROLLER

Item No.	Description	Outside L x W x D	MSRP
706215	Controller Complete	16" x 13.5" x 31"	$134.36
706220	Texas Controller	24" x 24" x 42"	$258.15

The Controller Complete is designed to accommodate 8 farm modules. It includes a 13 gallon reservoir, 8 gallon controller, tubing, fittings and float valve.

The Texas Controller accommodates 16 farm modules 20 gallon reservoir and 20 gallon controller.

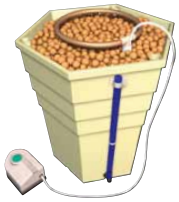
706215

706220

POWERGROWER ECO®

Item No.	Description	Outside L x W x D	MSRP
706635	PowerGrower Eco®	13" x 13" x 15"	$80.12

The new hexagonal PowerGrower Eco® features a great new design. It is 15 inches across the top and 15 inches tall and consists of a single growing chamber at the top with integrated reservoir below. Complete system includes: 5.7-gallon reservoir, 3-gallon growing chamber, pumping column and support tube, drip ring, 1/2" grommet, drain level tube, Elite® 800 air pump, 9L Hydroton® and 3-part Flora Kit.



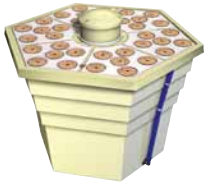
RAINFOREST® AEROPONICS SYSTEMS

Item No.	Description	Outside L x W x D	MSRP
706705	Rain Forest® 66 System	22.5" x 22.5" x 19.5"	$291.50
706710	Rain Forest® 318 System	22.5" x 22.5" x 19.5"	$295.95
706715	Rain Forest® 236 System	22.5" x 22.5" x 19.5"	$291.50

706705

706715

706710



The Rainforest® 66 is a favorite among users who wish to grow medium to large size plants. Vortex® Sprayer lifts and oxygenates the nutrient solution, and then gently distributes it over cutting's bases or root systems. This system includes: 17-Gallon reservoir with lid, six - 6" lid inserts, Vortex® Sprayer, 6" plastic cups, CocoTek® liners, CocoTek® caps and 3-Part Flora Kit.

The RainForest® 318 can accommodate up to eighteen small plants from cuttings to harvest, or up to ninety cuttings for rooting and transplantation using the 3" CocoTek® coconut caps included. Vortex® Sprayer lifts and oxygenates nutrient solution then gently sprays it over cutting bases or root systems. This system includes: 17-Gallon reservoir with lid, CocoTek® caps, six 3" lid inserts, Vortex® Sprayer, 3" plastic cups, CocoTek® liners and 3-Part Flora Kit.

Growers can use the RainForest® 236 to create a modestly sized nursery. Use this model to propagate cuttings or to quick-start seeds in a small footprint area. Vortex® Sprayer lifts and oxygenates nutrient solution then gently sprays it over cutting bases or root systems. This system includes: 17-Gallon reservoir with lid, six 2" lid inserts, Vortex® Sprayer, 2" plastic cups, CocoTek® liners, CocoTek® caps and 3-Part Flora Kit.

ECO GROWER® DRIP HYDROPONIC SYSTEM

Item No.	Description	Outside L x W x D	MSRP
706721	Eco Grower® System	22.5" x 22.5" x 15.5"	$233.75

The Eco Grower® incorporates an air driven "spider" drip system and uses the same revolutionary hexagonal reservoir with removable six inch lid inserts. Each lid insert will accommodate one 6" net pot that can easily grow very large plants. In keeping with our commitment to the environment, General Hydroponics® will soon release versions of the Eco Grower® that will operate with electricity recovered from solar panels. Includes: 17-Gallon reservoir, spider drip assemble, pumping column, insert lid, six - 6" lid inserts, net cups, CocoTek® liners, Elite 800 air pump, 1/4" air line, Hydroton®, Flora nutrients.

AEROJET™

Item No.	Description	Outside L x W x D	MSRP
706075	4 Tray Aerojet™ 42" x 54" Reservoir Size: 20 gallon	55" x 46.25" x 20"	$999.95

Micro jets spray the roots of the plants allowing for aggressive growth rates from the high levels of oxygen to the root zone. Ideal for schools, research and educational facilities to monitor root system development. Preferred by advanced growers as the method of choice in hydroponic production. The Aerojet™ is powered by a high output pump providing a super-oxygenated environment to the root system. Mist continually or in micro bursts. Aerojet™ grow trays are 8" wide x 42" long with a mandatory removable lid for ease of maintenance and necessary cleaning. Each tray holds 6 each - 3.75" net pots.

ECONO JET™ EBB & FLOW SYSTEMS

Item No.	Description	Outside L x W x D	MSRP
706250	2' x 2' Econo Jet™ System	30.5" x 23.25" x 18"	$213.95
706270	3' X 3' Econo Jet™ with Bench & 40 gallon reservoir	50" x 41" x 21.5"	$499.95

The Econo Jet™ line was developed to assist growers obtain a high quality hydrogarden, but priced such that it is comparable with do-it-yourself components. The Econo Jet™ line is ideal for small to medium size gardens where expandability is not a concern. These units are simple, sturdy, and reliable. Includes: reservoir, lid, porthole cover, tray, pump and plumbing.

706270

706250

MICROGARDEN™ - 14" x 30"

Item No.	Description	Outside L x W x D	MSRP
706620	Microgarden™ Ebb & Flow	31" x 13.75" x 17"	$241.95
706610	Microgarden™ Aeroponic	31" x 13.75" x 17"	$334.95

Hydrogardening is fun, simple, and low maintenance with the Microgarden™. It provides an inexpensive and automated method of providing your plants with optimal levels of water, nutrients, and oxygen for rapid growth rates, higher yields, increased nutritional value, heightened fragrances and flavors. Complete unit includes: 10 gallon reservoir, pump, pots, nutrients, grow substrate, timer and pH kit.

706620

706610

TURBOGARDEN™ - 22" x 36"

706960

706950

Item No.	Description	Outside L x W x D	MSRP
706960	Turbogarden™ Ebb & Flow	35" x 22" x 19.5"	$334.95
706950	Turbogarden™ Aeroponic	35" x 22" x 19.5"	$515.95

Experience faster growth rates, higher yields, increased nutritional value, heightened fragrances, and ease of maintenance with the fully automated Turbogarden™. Perfect for growing numerous lush green healthy fruits, flowers, vegetables and culinary herbs in a 2' x 3' area! Complete unit includes: Pump, pots, nutrients, grow substrate, timer and pH kit. It also offers a large 25 gallon reservoir.

BABY BLOOMER® BARE BONES

Item No.	Description	Outside L x W x D	MSRP
706230	Baby Bloomer® Bare Bones	30.5" x 12.5" x 30.5"	$99.95

The Bare Bones Baby Bloomer is one of the most versatile small hydroponic gardens on the market. Offering just the basics (tray, reservoir and fittings), you add all your favorites to design your own system. Whether you choose to grow a couple of large plants or fill it with a rockwool slab and start your cuttings, the Bare Bones Baby Bloomer will help you grow fantastic plants! Vacuum formed from strong, durable ABS plastic - no seams, no cracking! The bedding tray is designed for easy access to reservoir.

ECONO 1 TRAY SYSTEM & ECONO 2 TRAY SYSTEM

Item No.	Description	Outside L x W x D	MSRP
706725	Econo 1 Tray System 3' x 3'	35.25" x 35.25" x 19.25"	$399.95
706735	Econo 2 Tray System 3' x 6'	69.5" x 35.25" x 19.25"	$579.95

The One and Two Tray Econo Systems are strong, quality built Ebb & Flow hydroponic systems for the grower on a budget. Made in the USA. Built around our popular 3' x 3' tray, the Econo System has plenty of space to grow. The Two Tray Econo System doubles available growing space to 18 square feet. They include: One or Two 3' x 3' Econo Trays (.125" thick) are constructed of UV stabilized, impact resistant, ABS plastic material; Easy to assemble galvanized steel table frame with strong injection molded plastic corners; Submersible pump using energy efficient design and quiet operation with magnetic rotor technology; American Hydroponics fill/drain and over flow fitting kit, including vinyl fill/drain tubing; 30-gallon reservoir constructed of UV stabilized, impact resistant, ABS plastic material; Two year warranty (180 days on pump).

BIGFOOT COMPLETE

Item No.	Description	Outside L x W x D	MSRP
706700	BigFoot Complete	45" x 26" x 19"	$429.95

Bedding and reservoir trays are UV stabilized, vacuum formed ABS plastic - no seams, no cracking! The bedding tray is designed to prevent standing water. The 25 gallon reservoir is designed to nest with bedding tray and provide easy access to the reservoir. Includes: easy to assemble galvanized steel table frame, reliable pump, pre-assembled plumbing/fittings.

MULTI-PURPOSE TRAY (MPT)

Item No.	Description	Outside L x W x D	MSRP
706765	Black MPT Tray	40" x 13" x 3"	$39.95

At 14" x 30", the Multi-Purpose Tray (MPT) is a perfect, lightweight growing tray designed for propagation and light duty growing. You can place several MPT trays together to create a high performance seedling system. Designed with versatility in mind, the MPT comes undrilled with preplaced positions for fill/drain fittings to make it a fully operational Ebb & Flow tray.

ECONO TABLE FRAME FOR 3' X 3' TRAY

Item No.	Description	Outside L x W x D	MSRP
706730	Econo Table Frame	35" x 35" x 19.25"	$148.95

Econo System table frames are manufactured using 1" galvanized steel with 18" legs assembled with strong injection molded plastic corners. Easy to assemble and light weight for easy placement.

ECONO TRAY 3' X 3' & HEAVY DUTY TRAY 3' X 3'

707205

706745

Item No.	Description	Outside L x W x D	MSRP
707205	Econo Tray	35.25" x 35.25" x 4.25"	$84.95
706745	Heavy Duty Tray	35.25" x 35.25" x 4.25"	$94.95

A 3' x 3' growing area is perfect for growing healthy plants. This size growing area is easy to work with and is a great size for light displacement. With the fill and drain in the middle of the tray, you will not have standing water after the tray has drained. These trays are 4" deep and come in two thicknesses. The Heavy Duty tray is .156" thick and the Econo Tray is .125" thick. Made of black ABS, the ribbed 3 x 3 trays are stress-engineered for complete drainage and maximum strength. Both are super-strong and can hold as many plants as you can fit.

NETWELL INSERT FOR 3' X 3' TRAYS

Item No.	Description	Outside L x W x D	MSRP
706748	Netwell Insert	35" x 35" x 1"	$135.95

Custom designed "lid" for American Hydroponics 3' x 3' Econo or Heavy Duty trays. The Net Well holds (24) 5-1/2" Heavy Duty Net Pots (product #724430), lifting them off the bottom of the tray for supreme aeration. This "lid" also creates a cover for the roots of your plants, not allowing any light to penetrate the roots. Achieving the healthiest root zone possible is the key to large, lush plants!

CLABER OASIS SELF WATERING SYSTEM

Item No.	Description	MSRP
708775	Claber Oasis Self Watering System	$96.77

With the Oasis Self Watering System you do not have to worry about watering your plants when away from home. The Oasis has 4 independent watering programs: 10-20-30-40 days that can be selected by simply turning the dial to water a maximum of 20 plants. LED light located on programming panel indicates when unit is in use or when battery is low. Isolated tank prevents condensation and non-slip rubber feet avoids scratching of surface or sliding of tank. Operates on one 9v battery (not included). Gravity feed. No pump. Unit dimensions is 15" x 15" x 15" and weighs 9.5 lbs.

SENTINEL MODULAR EBB & FLOW SYSTEM (MEF-1) & ACCESSORIES

Item No.	Description	MSRP
706566	Modular Ebb & Flow System - MEF-1	$589.95
706570	MEF 6 Module Expansion Kit	$144.95
706575	MEF Inner Grow Module	$5.95
706580	MEF Outer Grow Module	$8.95

The MEF modular Ebb & Flow hydroponics system has features not available on other "economy" hydroponics systems. Each growing module consists of separate outer and inner molded containers that have been custom engineered. Each module can hold up to 10-liters or 2 ½ gallons of growing medium. The MEF controller will flood and drain the growing modules at timed intervals. It can also be used in a "top-feed" drip configuration with a run-to-waste option:

- Up to 48 growing "modules" can be connected to a single system.
- Distribution reservoir monitors and distributes the water to the modules.
- All plastics in contact with the water or plants are 100% food-grade.
- Growing modules are engineered to fully drain, no more stagnant water in the root zone.
- High-flowing 20 mm/¾" water tubing and fittings makes for fast flood and drain times.
- Ultra-safe, "low-voltage" water pumps operate on 24-volts DC.
- Single cable connection and threaded water fittings make installation trouble-free.
- Digital controller provides a full automatic mode. Automatically times the flood & drain cycle to monitor the pumps and activates an alarm if there is a pump problem.

- Integrated leak sensor can detect water leaks and activate an alarm. The controller also has multiple alarm modes that are user selectable.

The MEF system comes complete with the digital controller, the distribution reservoir, (2) high-flow pumps, (6) growing modules and all of the fittings & tubing to install the system. Purchase the appropriately sized reservoir seperately. The Sentinel MEF comes standard with a 3-year warranty on the controller and a 1 year on all other components.

EASY 2 GROW AUTOPOTS

Item No.	Description	MSRP
707600	1 Pot Easy 2 Grow System	$42.95
707605	2 Pot Easy 2 Grow System	$59.95
707610	2 Pot Easy 2 Grow Kit with Reservoir	$82.95
707620	47 Liter Easy 2 Grow Reservoir & Lid	$27.95

The AutoPot is a gravity feed self watering planter. Since the system is gravity fed you have no need for a pump. The auto pot single is a 1.93 gallon square pot that is meant to be filled with a 50/50 soilless mix of choice. By connecting the ¼" feeder tube to a reservoir (of any size) placed at a higher elevation than the auto pot. The aqua valve will automatically water the plant as needed allowing "dry" periods so that the plants are not over watered reducing the risk of obtaining root rot and other disease and pest infestations common with over watering. AutoPots are good for use both indoor and outdoor as well as for growing ornamentals or edible plants.

The AutoPot dual is the same as the auto pot single except it is a two plant system. Both square containers are 1.93 gallon that fit into a dual cavity tray providing automatic watering through the same gravity feed concept.

The Easy 2 Grow kit is the same as the AutoPot 2 or Easy 2 Grow Dual PLUS a 12.4 gallon reservoir with a cover. All of the components included in the easy grow kit can be stored inside of the reservoir during off season times.

105 GALLON STAND UP GREEN RESERVOIR

This polyethylene vertical storage tank is manufactured to strict guidelines to ensure years of high performance use. Manufactured using resins that meet FDA specifications to ensure safe storage of potable water. Rugged, impact and corrosion resistant, one piece seamless construction makes this tank the perfect choice for fertilizer solutions. The tank has capacity for 105 gallons and is 23" in diameter and 63" tall. Each tank includes an 8" threaded lid and a 2" by 3/4" bushing with a 3/4" plug. The tank comes in opaque green to block light, thus preventing algae build up, assuring quality nutrients with every feed.

Item No.	Description	Dimensions	MSRP
707169	105 Gallon Stand Up Reservoir	23" Dia x 63" H	$349.95

48 GALLON STAND UP RESERVOIR

This unique reservoir is perfect for areas that are tight on floor space. Foot print is only 18" x 12". It is 63.5" tall. Features standard hose threads for easy connection to a garden hose. Made from translucent **FDA approved**, durable plastic. Back is flat to go up against the wall. Comes with straps to secure to a wall. Five year warranty. Made in the USA.

Item No.	Description	Outside L x W x D	MSRP
707322	48 Gallon Stand Up Reservoir	63.5" x 18" x 12"	$139.95

HEAVY DUTY RESERVOIRS

Item No.	Description	Outside L x W x D	MSRP
707330	35 Gallon Gray Reservoir	37.25 x 28 x 12.75	$67.95
707332	55 Gallon Gray Reservoir	51.5 x 27.5 x 13	$118.95
707335	100 Gallon Gray Reservoir	52 x 30.75 x 24	$149.95

These heavy duty commercial grade reservoirs will last for years! They are made with a high quality **FDA approved**, UV protected plastic to ensure uniform thickness and strength for maximum durability and longevity. One piece construction with rounded edges. Five year warranty. Made in the USA.

BOTANICARE® RESERVOIRS & LIDS

Item No.	Description	Outside L x W x D	MSRP
707115	10 Gal lid	14.25" x 23.75" x .75"	$32.50
707120	10 Gal reservoir	23.5" x 14.25" x 11.75"	$50.95
707130	20 Gal lid	26" x 20" x 1"	$37.25
707135	20 Gal reservoir	26" x 20" x 11.25"	$54.50
707140	25 Gal lid	35.25" x 22.25" x .75"	$50.95
707145	25 Gal reservoir	35" x 22" x 13.25"	$69.95
707150	40 Gal lid	37.25" x 29.5" x 1"	$50.95
707155	40 Gal reservoir	37" x 29.25" x 12"	$79.95
707215	70 Gal lid	54" x 31" x 1.5"	$83.50
707210	70 Gal reservoir	53.25" x 30.25" x 12"	$162.95
707160	115 Gal lid	51" x 51" x 1.5"	$129.95
707165	115 Gal reservoir	50" x 50" x 14.5"	$213.95

NOTE: All Botanicare reservoirs, lids and porthole covers are sold a la carte. Each component needs to be purchased separately.

These reservoirs are designed for simplicity in maintenance and performance. Each reservoir works with a specially designed lid containing an access port. This access port allows for a porthole cover with a raised grip. This standard option allows the gardener easy access to the reservoir without taking the entire lid off, ensuring a more functional routine of adding solutions, nutrients and water.

PORTHOLE COVER

For use with Botanicare® reservoirs.

Item No.	Description	Outside L x W x D	MSRP
707195	Porthole Cover (for 10, 20, 40, 70, 115 gal)	7.25" x 5.5" x .2"	$7.95
707197	Porthole Cover for Turbogarden (25 gal)	6.75" x 6.5" x .2"	$9.85
707246	Porthole Cover for Microgarden & Eazy Drain (50 & 100 gal)	11.5" x 5.75" x .2"	$10.25

BOTANICARE® EAZY DRAIN™ RESERVOIRS & LIDS

Item No.	Description	Outside L x W x D	MSRP
707163	50 Gal Eazy Drain™ lid	44.5" x 29.5" x 1.125"	$74.50
707164	50 Gal Eazy Drain™ bottom	41.25" x 29.25" x 13.5"	$153.50
707243	100 Gal Eazy Drain™ lid	81.25" x 29.5" x 1"	$116.50
707244	100 Gal Eazy Drain™ bottom	81.5" x 29.25" x 13.5"	$274.50

The Eazy Drain™ Reservoirs use a gradual interior slope to allow the solution to drain completely without manually tilting the units. Designed to be used with a bulkhead fitting and on/off valve, the Eazy Drain™ makes maintaining your hydroponic systems hassle free. The Eazy Drain™ also includes molded volume markers in gallons and liters so you'll always know how much solution you have left.

55 GALLON DRUM

Item No.	Description	MSRP
707167	55 Gallon Drum	$119.95

Excellent quality multipurpose drum. Made with food grade plastic. Includes lid. The drum features:

- New/Unused
- Stackable
- Height: 36.5"
- Diameter: 23.5"
- Weight: 23 lbs

GH PANDA RESERVOIR & LID

Item No.	Description	Outside L x W x D	MSRP
707265	40 gallon Panda Reservoir bottom	47.5" x 23.75" x 12.25"	$135.34
707266	40 gallon Panda Reservoir lid (no holes)	48" x 24" x 12.5"	$83.83

The GH Panda reservoir is 40 gallons. It has a white exterior (which reflects heat) and a black interior (which discourages algae growth). It offers a small foot print and is very durable. Purchase lid separately.

BLACK RESERVOIRS & LIDS – ABS PLASTIC

Graduated lines indicate water level. Heavy duty thick ABS plastic.

Item No.	Description	Outside L x W x D	MSRP
707670	30 Gal Reservoir	30.5" x 30.5" x 11.25"	$62.95
707685	30 Gal Reservoir Lid	30.5" x 30.5" x 1"	$45.95
707675	70 Gal Reservoir	44" x 44" x 12"	$102.95
707690	70 Gal Reservoir Lid	43.5" x 43.5" x 1.25"	$66.95
707680	100 Gal Reservoir	49" x 49" x 14"	$149.95
707695	100 Gal Reservoir Lid	45" x 45" x 4"	$78.95

35 GALLON RESERVOIR

Item No.	Description	Outside L x W x D	MSRP
707275	35 Gallon Reservoir	32.25" x 26.25" x 12.5"	$109.95

This high quality, versatile reservoir is made by American Hydroponics. It works great for a variety of different hydroponic applications. This reservoir does not fit under the Econo Systems.

GROTEK™ RESERVOIRS & LIDS

Item No.	Description	Outside L x W x D	MSRP
707230	260 Liter (69 gal) Reservoir	45" x 45" x 12"	$111.15
707235	260 Liter (69 gal) Reservoir Lid	43" x 43" x 1"	$87.60
707240	378 Liter (100 gal) Reservoir	51" x 51" x 13.5"	$155.57
707245	378 Liter (100 gal) Reservoir Lid	49" x 49" x 1"	$101.50

Grotek™ reservoirs fit under a variety of flood tables or aeroponic systems. Each unit is available with accompanying lid and includes water level indicators for ease of use.

DUTCH LEACH TRAY WITH 2 ELBOWS

Item No.	Description	Dimensions	MSRP
707430	Dutch Leach Tray with 2 Elbows	6" x 40"	$15.55

Heavy duty plastic leach tray with 2 drain elbows & end caps. Designed to work with 6" rock wool slabs, but also works well with a variety of other growing mediums.

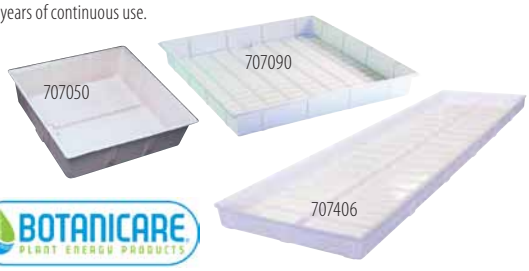
DUTCH LEACH TRAY ELBOWS & CAPS

Item No.	Description	MSRP
707435	Dutch Leach Tray Elbows	$1.46/ea
707440	Dutch Leach Tray Endcap	.57¢/ea

BOTANICARE® WHITE GROW TRAYS

Item No.	Description	Outside L x W x D	Capacity in Gals	MSRP
707050	2' x 2' White	23.5" x 23.5" x 7.5"	7.6	$46.50
707080	2' x 4' White	43.5" x 25.75" x 7.5"	17.5	$69.95
707406	2' x 8' White	92.5" x 24.5" x 3.75"	27	$125.50
707065	3' x 3' White	40.5" x 40.5" x 7.5"	22.4	$96.95
707225	3' x 6' White	77" x 41.5" x 7"	45.8	$171.95
707090	4' x 4' White	54" x 54" x 7"	41.6	$131.95
707045	4' x 8' White	102.5" x 53.25" x 7"	81.9	$259.95
707030	42" x 8" x 4" White	42" x 8" x 4"	4.4	$30.25
707035	44" x 6" x 4" White	44" x 6" x 4"	3.7	$24.25
707060	22" x 36" x 7" White (for TurboGarden)	36" x 22" x 7"	10.9	$65.50

These white grow trays are manufactured with durable high impact ABS plastic and made for years of continuous use.



BOTANICARE® BLACK GROW TRAYS

Item No.	Description	Outside L x W x D	Capacity in Gals	MSRP
707061	2' x 4' Black	43.5" x 25.75" x 7.5"	17.5	$58.95
707066	3' x 3' Black	40.5" x 40.5" x 7.5"	22.4	$79.00
707091	4' x 4' Black	54" x 54" x 7"	41.6	$109.00
707237	3' x 6' Black	77" x 41.5" x 7"	45.8	$139.00
707047	4' x 8' Black	102.5" x 53.25" x 7"	81.9	$192.95

NEW!

These are the same high-quality trays as the industry standard Botanicare White Grow Trays, but are now also available in black. They feature the same thickness and design as their white trays.

BLACK GROW TRAYS – ABS PLASTIC

Item No.	Description	Outside L x W x D	MSRP
707650	2' x 4' black grow tray	47" x 24" x 5"	$52.95
707655	4' x 4' black grow tray	48" x 48" x 6"	$75.95
707660	4' x 6' black grow tray	72" x 48" x 7"	$111.95
707665	4' x 8' black grow tray	98" x 49" x 7.5"	$142.95

BLACK GROW TRAYS – STYRENE PLASTIC

Item No.	Description	Outside L x W x D	MSRP
707170	2.5' x 4' black grow tray	48" x 28.5" x 7"	$76.95-$82.95
707175	4' x 4' black grow tray	48" x 48" x 7"	$97.95-$112.95
707190	4' x 6' black grow tray	72" x 48" x 6"	$141.95-$156.95
707180	4' x 8' black grow tray	96" x 48" x 8"	$185.95-$204.95

BOTANICARE® HUMIDOMES

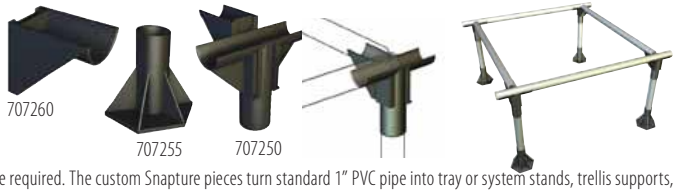
Item No.	Description	Outside L x W x D	MSRP
707005	2' x 2' Humidome™	22" x 22" x 8"	$72.50
707010	2' x 4' Humidome™	44" x 24" x 7"	$114.95

Clear humidomes are available for 2 of the Botanicare® trays that we offer. The domes are heavy duty models that are a must for propagation!

Shown with optional tray.

SNAPTURE® SNAPSTAND FITTINGS & SNAPSTAND 4' X 4' TRAY STAND

Item No.	Description	MSRP
707262	Snapstand 4' X 4' Tray Stand	$90.00
707250	Snapture® Cross Fitting	$4.79
707255	Snapture® Foot Base	$4.79
707260	Snapture® Dovetail 90 degree	$3.79



A versatile design to support 4' x 4' trays. Use two 4' x 4' stands to support a 4' x 8' tray with minimal modification.

The General Hydroponics Snapture is specially designed for strength and is literally a snap to assemble. No tools are required. The custom Snapture pieces turn standard 1" PVC pipe into tray or system stands, trellis supports, light hangers, grow tent frames and more.

BENCHES

Item No.	Description	MSRP
706140	4' x 4' Bench	$189.95
707046	4' x 8' Bench	$379.95

Make your tray more sturdy with a heavy duty metal bench.

CONICAL DRILL BIT

Item No.	Description	MSRP
707200	Conical Drill Bit	$60.95

Drill your own trays with ease with a self centering conical drill bit! Drills holes from 7/8" up to 1 3/8".

BIO GREEN CLEAN

Item No.	Description	Size	MSRP
708480	Bio Green Clean	Quart	$29.95
708485	Bio Green Clean	Gallon	$89.95
708490	Bio Green Clean RTU	32 oz.	$14.95

BIO GREEN CLEAN is the toughest all-natural cleaner in the world. It is comprised of purified water, amino acids, minerals, and other ingredients derived from leafy green, edible and seed-bearing plants. Features &benefits:

- All natural
- Non-toxic
- Biodegradable
- Highly concentrated formula
- Reduces cleaning time dramatically
- Replaces harmful and ineffective chemical cleaners
- Removes grease, oil, dirt, nutrient/salts build-up, green algae, etc.
- Leaves trays, reservoirs, equipment, pumps, tubing, light fixtures, benches, floors, walls and entire growing area spotless and looking brand new!

EVEREST NATION RAIN ORGANIC CLEANER

Item No.	Description	Size	MSRP
708850	Everest Nation - Rain	Quart	$14.95
708855	Everest Nation - Rain	Gallon	$29.95

industry exclusive

Rain is an agriculture cleaning solution engineered to remove fertilizer salts. Our patented pending technology combines Everest Water and Natural Plant Extracts to provide a unique cleaning solution. Safe to use on all agriculture equipment such as pumps, plastics, metals, tools, reservoirs and tables. Rain is designed for everyday use and is safe on and around your plants. Not intended for use on live vegetation.

EVEREST NATION HORIZON 3 ORGANIC CLEANER

Item No.	Description	Size	MSRP
708865	Everest Nation - Horizon 3	Quart	$16.39
708870	Everest Nation - Horizon 3	Gallon	$39.49

industry exclusive

Horizon 3 is an agriculture cleaning solution engineered to remove fertilizer salts. Safe to use on all agriculture equipment like pumps, plastics, metals, tools, reservoirs and tables. Our patented pending technology combines Everest Water and Humboldt Certified Organic Plant Extracts/Oils to provide a unique cleaning solution. Not intended for use on live vegetation.

EVEREST NATION WHITE OUT ORGANIC CLEANER

Item No.	Description	Size	MSRP
708880	Everest Nation - White Out	Quart	$18.95
708885	Everest Nation - White Out	Gallon	$39.49

industry exclusive

White Out has been developed as a soaking solution for hard to clean salt deposits usually found on neoprene. Created as a safe, organic and naturally strong formula, White Out is able to go deep into porous areas removing salts and leaving clean. White out will recondition any neoprene to a better than new state. Not intended for use on live vegetation.

Works Great On Neoprene

NO HOLES BAR BASIC LIGHT STAND

Item No.	Description	MSRP
710170	No Holes Bar Basic Light Stand	$219.95

The No Holes Bar is a simple but very sturdy grow light stand that is designed for indoor flower / plant gardening and also works well in green houses. With this product any simple hydroponics systems can be transformed into a commercial hydroponics systems with only one rack and a 2 x 4 cut to desired length. There is no need to purchase special equipment, it can be utilized with many set-ups. The No Holes Bar Basic Model is great for bucket systems, or any system that does not require tray support.

The Basic model is a grow light rack/stand with only one 2 x 4 to hang your lights, fans, ventilation etc.

NO HOLES BAR COMPLETE LIGHT STAND

Item No.	Description	MSRP
710175	No Holes Bar Complete Light Stand	$329.95

The No Holes Bar is a simple but very sturdy grow light stand that is designed for indoor flower / plant gardening and also works well in green houses. With this product any simple hydroponics systems can be transformed into a commercial hydroponics systems with only one rack and a 2 x 4 cut to desired length. There is no need to purchase special equipment, it can be utilized with many set-ups.

The No Holes Bar Complete is not only a grow light stand but also an indoor grow rack that is fully adjustable in every direction. It comes with lower tray rack system, basic rack and lower cross support, and trellis brackets. The No Holes Bar Complete does not include the trellis wood, 2 x 4's, netting, and tray.

POWER CLONER™ BY BOTANICARE®

Item No.	Description	Reservoir	MSRP
706178	Power Cloner™ 45 Site Machine	10 gallon	$371.95
706186	Power Cloner™ 70 Site Machine	20 gallon	$501.95
706187	Power Cloner™ 165 Site Machine	40 gallon	$814.95
724299	Replacement Neoprene Inserts 49/sheet		.53¢/ea

706178 24.5" x 15.5" x 19" | 706186 26.75" x 20.75" x 17.5" | 706187 38" x 30.5" x 17.5"

Power Cloner's Include:

- High-pressure submersible pump with 2 year manufacturer's warranty
- Large capacity reservoir
- Air pump with air diffusers
- Clear Humidome™
- Power Clone Rooting Solution™

Put any fruit, flower, herb, shrub, or tree cutting in a Power Cloner™ and be amazed with the prolific roots initiated in only a 5 to 10 day period. Power Cloner's root cuttings with the aeroponics method which is one of the simplest and fastest ways to initiate roots. They are highly efficient and spray plant cuttings utilizing a high output pump and microjets to deliver a highly oxygenated rooting solution.

25 SITE CLONE MACHINE & DAISY CLONER™ BY BOTANICARE®

Item No.	Description	Outside L x W x D	MSRP
706172	25 Site Clone Machine	12.75" x 12.75" x 11.25"	$160.95
706245	Daisy Cloner™ - 8	10" x 10" x 8"	$74.50

The 25 Site Clone Machine is a improved redesign of the 20 Site Clone Machine. It provides 5 more clone sites in a smaller space. The compact, clean designed reservoir is made from high density poly ethylene which is more durable for longer product life. This unit includes a high-output 190 GPH submersible pump, 25 neoprene inserts, Power Clone Solution™ rooting hormone.

A small version of the Clone Machines™, this Daisy Cloner™ works great! It comes with a pump, net pots and root guards. It has 8 - 2" plant sites.

EZ-CLONE™ introduces the next generation in cloning technology. New 30, 60, & 120 cutting units. Easy to use; start cloning in minutes. Roots in 5 days with 100% success. Get guaranteed results now! Standard Features:

- Custom neoprene collars
- High flow-rate irrigation system
- External air intake system
- Deep lid base for easy access
- Leak resistant lid

EZ-CLONE™ 30

Item No.	Description	MSRP
706370	EZ-Clone™ 30	$309.95

Tub type:	Custom ABS plastic	Water pump rating:	450 gph	Dimensions:	23" x 17" x 15"
Tub capacity:	12 gallon (approx)	Water capacity:	6 gallon (approx)	Replacement manifold part #706371.	
Cutting capacity:	30	Optimal water temp:	75° F		
Cutting medium:	Custom neoprene collar	Optimal water pH:	6.3		

EZ-CLONE™ 60

Item No.	Description	MSRP
706375	EZ-Clone™ 60	$354.95

Tub type:	Custom ABS plastic	Water capacity:	8 gallon (approx)
Tub capacity:	16 gallon (approx)	Optimal water temp:	75° F
Cutting capacity:	60	Optimal water pH:	6.3
Cutting medium:	Custom neoprene collar	Dimensions:	33" x 20" x 15"
Water pump rating:	800 gph	Replacement manifold part #706371.	

EZ-CLONE™ 120

Item No.	Description	MSRP
706380	EZ-Clone™ 120	$454.95

Tub type:	Custom ABS plastic	Water capacity:	11 gallon (approx)
Tub capacity:	22 gallon (approx)	Optimal water temp:	75° F
Cutting capacity:	120	Optimal water pH:	6.3
Cutting medium:	Custom neoprene collar	Dimensions:	44" x 24" x 15"
Water pump rating:	1100 gph	Replacement manifold part #706381.	

EZ-CLONE™- REPLACEMENT PUMPS

Item No.	Description	MSRP
706395	Replacement Water Pump (30) - 450 GPH	$99.95
706400	Replacement Water Pump (60) - 800 GPH	$112.95
706405	Replacement Water Pump (120) - 1100 GPH	$135.50
706410	Replacement Air Pump	$15.20

EZ-CLONE™- REPLACEMENT NEOPRENE INSERTS & EZ-CLONE™ SPRAYER

Item No.	Description	MSRP
706390	Ez-Clone™ Neoprene Replacement Inserts	.50¢/ea
706391	Ez-Clone™ Neoprene Replacement Inserts	.50¢/ea
706392	EZ-Clone™ 360° Sprayer	.70¢/ea

Custom made neoprene collars are pre-slit for easy insertion of cuttings.

Replacement sprayer for all models of EZ-Clone™ units.

ECOPLUS® SUBMERSIBLE PUMPS

These submersible water pumps are great for everything from fountains to hydroponic systems. Powerful oil free high magnetic rotor. Ceramic shaft and bearing insures reliability and quiet operation. Trouble free one moving part. Strainer protects impeller from damage. One year warranty.

Item No.	Description	Cs Pk	Watts	Inlet NPT**	Outlet NPT**	Included Fittings Barbed Size (B) & Threaded Size (T) Fitting #1	Fitting #2	Fitting #3	Fitting #4	Rated GPH	Max Height	Cord Length	MSRP
728490	Eco 66 Submersible Pump	60	5.5	n/a	Press on	¼"(B) x Press on (T)	⅜"(B) x Press on (T)	½"(B) x Press on (T)	–	66	1.6'	69"	$8.99
728492	Eco 100 Submersible Pump*	30	5	n/a	3/8"	⅜"(B) x ⅜"(T)	½"(B) x ⅜"(T)	–	–	100	3.0'	69"	$10.99
728495	Eco 132 Submersible Pump	48	9	n/a	Press on	¼"(B) x Press on (T)	⅜"(B) x Press on (T)	½"(B) x Press on (T)	–	132	4.3'	69"	$11.49
728300	Eco 185 Submersible Pump	12	10	3/4"	5/8"	¾"(B) x ⅝"(T)	½"(B) x ⅝"(T)	⅜"(B) x ⅝"(T)	½"(B) x ⅝"(T)	185	3.9'	69"	$14.49
728305	Eco 264 Submersible Pump	18	20	3/4"	3/4"	¾"(B) x ¾"(T)	½"(B) x ¾"(T)	½"(B) x ¾"(T)	Nozzle x ¾"(T)	264	6.3'	69"	$21.99
728310	Eco 396 Submersible Pump	24	25	3/4"	3/4"	2{¾"(B) x ¾"(T)}	2{½"(B) x ¾"(T)}	¾"(B) x ¾"(T)	Nozzle x ¾"(T)	396	6.3'	69"	$25.49
728315	Eco 633 Submersible Pump	12	35	1 1/4"	3/4"	2{¾"(B) x ¾"(T)}	2{½"(B) x ¾"(T)}	¾"(B) x 1¼"(T)	Nozzle x ¾"(T)	633	7.8'	175"	$46.49
728320	Eco 1056 Submersible Pump	6	70	1 1/4"	1"	2{¾"(B) x 1"(T)}	2{½"(B) x 1"(T)}	1"(B) x 1¼"(T)	–	1056	9.1'	175"	$69.49
728325	Eco 1267 Submersible Pump	6	90	1 1/4"	1"	2{¾"(B) x 1"(T)}	½"(B) x 1"(T)	2{1"(B) x 1"(T)}	1"(B) x 1¼"(T)	1267	14.7'	175"	$84.49
728330	Eco 1584 Submersible Pump	6	130	1 1/4"	1"	2{½"(B) x 1"(T)}	1"(B) x 1"(T)	2{¾"(B) x 1"(T)}	1"(B) x 1¼"(T)	1584	13.1'	175"	$100.99
728333	Eco 2245 Submersible Pump	6	226	1 1/4"	1 1/4"	¾"(B) x 1¼"(T)	1"(B) x 1¼"(T)	1¼"(B) x 1¼"(T)	1¼"(B) x 1¼"(T)	2245	16.5'	175"	$138.99
728335	Eco 3170 Submersible Pump*	2	180	1 ½"	1 ½"	1½"(B) x 1½"(T)	2"(B) x 1½"(T)	–	–	3170	14.8'	392"	$194.99
728485	Eco 4950 Submersible Pump*	2	250	1 ½"	1 ½"	1½"(B) x 1½"(T)	2"(B) x 1½"(T)	–	–	4950	19.7'	392"	$199.99

* Not UL listed **All threaded fittings are in national pipe thread measurements.

ECOPLUS® SUBMERSIBLE PUMP REPLACEMENT SHAFT & IMPELLER

Replacement shaft and impeller for EcoPlus® submersible water pumps.

Item No.	Description	MSRP
728491	Eco 66 shaft and impeller	$2.99
728493	Eco 100 shaft and impeller	$2.99
728496	Eco 132 shaft and impeller	$2.99
728301	Eco 185 shaft and impeller	$3.99
728306	Eco 264 shaft and impeller	$5.99
728311	Eco 396 shaft and impeller	$11.99
728316	Eco 633 shaft and impeller	$15.99
728321	Eco 1056 shaft and impeller	$19.99
728326	Eco 1267 shaft and impeller	$21.99
728331	Eco 1584 shaft and impeller	$25.99
728334	Eco 2245 shaft and impeller	$39.99
728336	Eco 3170 shaft and impeller	$69.99
728486	Eco 4950 shaft and impeller	$69.99

ECOPLUS® SUBMERSIBLE PUMP REPLACEMENT FITTINGS

Replacement inlet and outlet fittings for EcoPlus® submersible water pumps.

Item No.	Description	MSRP
728537	Eco 1/4" barbed with press on fitting	$1.49
728538	Eco 3/8" barbed with press on fitting	$1.49
728540	Eco 1/2" barbed with press on fitting	$1.99
728542	Eco 3/8" barbed x 3/8" threaded fitting	$1.99
728544	Eco 1/2" barbed x 3/8" threaded fitting	$1.99
728546	Eco 1/2" barbed x 1/2" threaded fitting	$1.99
728548	Eco 3/4" barbed x 1/2" threaded fitting	$2.49
728550	Eco 1/2" barbed x 3/4" threaded fitting	$1.99
728555	Eco 3/4" barbed x 3/4" threaded fitting	$2.49
728560	Eco 1" barbed x 3/4" threaded fitting	$2.99
728561	Eco 3/4" barbed x 1" threaded fitting	$2.99
728562	Eco 1" barbed x 1" threaded fitting	$3.99
728563	Eco 1 1/4" barbed x 1" threaded fitting	$3.99

ECOPLUS® 1500 *ELITE* SUBMERSIBLE PUMP

Item No.	Description	Rated GPH	MSRP
728497	EcoPlus® 1500 Elite	1500	$114.95

This heavy duty, high quality pump is the latest introduction to the EcoPlus® pump family. It draws water from the bottom.

- 1500 GPH
- Bottom Intake
- Removes water down to 1/8"
- 12' power cord
- 1" NPT hose ftting
- 3/4" barbed fitting
- 1" barbed fitting
- Max Height 20.3'
- 190 Watts
- 1 year warranty.

WATERPOWER 120 PUMP

Item No.	Description	Rated GPH	MSRP
728033	WaterPower 120 Pump	951	$109.98

The WaterPower pump has been designed for ease of use. It is constructed with the highest quality workmanship and finest materials to ensure long dependable use.

- Magnetically driven centrifugal pump.
- Max height: 13.8'.
- No seals to wear out and contains no oil.
- 1" NPT.
- Use submerged or in-line.
- Extra impeller and sponge filter included.

MONDI UTILITY SUMP PUMP

Item No.	Description	Rated GPH	MSRP
727095	Mondi Utility Sump Pump	1585	$119.95

NEW!

- A heavy duty, oil-less (water cooled) multipurpose pump suitable for water control: basement/indoor flooding, plant watering, water recirculation and more!
- Outfitted with a 1/2" HP motor that can pump up to 1585 gallons per hour.
- Constructed with an ultra durable casing that stands up to tough conditions.
- Faceted with an extra long 20' grounded cord.
- Equipped with 2 hose fittings; a multi sized hose fitting for industrial hoses and one for a garden hose.

MONDI 30" WATER PUMP EXTENSION WITH BALL VALVE

Item No.	Description	MSRP
708710	Mondi Water Pump Extension with Ball Valve	$15.95

NEW!

- Extends the water flow from the pump to the end of the handle. Works great with 55 gallon drums.
- Regulates water volume by use of a ball valve.
- Anodized, extruded aluminum poles that easily connect to each other with locking collars for additional height to a maximum of 42".
- Ergonomically designed extruded aluminum bend that acts like a handle for safely moving the connected pump from rain barrels or reservoirs. You no longer have to pull the pump out by the electrical cord or hose.
- Ingenious water aerator for rain barrels or reservoirs.

TNC - 1/4 HP PUMP

Item No.	Description	Rated GPH	MSRP
728115	TNC 1/4 HP Pump	1250	$183.33

The TNC centrifugal inline water pump is powerful and dependable. This water pump moves 1250 GPH through 1" pipe thread fittings and has a dependable ceramic/graphite seal. The TNC water pump is used in the AeroFlo2 - 60 site units.

MAG DRIVE PUMP 190 GPH

- 190 GPH maximum flow with a 7' shut-off
- 10' grounded power cord
- Built-in adjustable flow control
- 3/8" to 1/2" NPT
- Ceramic shaft
- Foam pre-filter and elbow included
- Three year limited warranty

Item No.	Description	Rated GPH	MSRP
728075	Mag Drive Pump	190	$49.95

MAG DRIVE PUMP 250 GPH

- 250 GPH maximum flow
- Max height 7'
- 10' grounded power cord
- Operates submerged or in-line
- 1/2" NPT
- Ceramic shaft
- Foam pre-filter included
- Three year limited warranty

Item No.	Description	Rated GPH	MSRP
728065	Mag Drive Pump	250	$74.95

MAG DRIVE PUMP 350 GPH

- 350 GPH maximum flow
- Max height 10.5'
- 10' grounded power cord
- Operates submerged or in-line
- 1/2" NPT
- Ceramic shaft
- Foam pre-filter included
- Three year limited warranty

Item No.	Description	Rated GPH	MSRP
728070	Mag Drive Pump	350	$86.95

MAG DRIVE PUMP 500 GPH

- 500 GPH maximum flow
- Max height 10.5'
- 10' grounded power cord
- Operates submerged or in-line
- 1/2" NPT
- Ceramic shaft
- Foam pre-filter included
- Three year limited warranty

Item No.	Description	Rated GPH	MSRP
728060	Mag Drive Pump	500	$102.95

MAG DRIVE PUMP 700 GPH

- 700 GPH maximum flow
- Max height 12.5'
- 10' grounded power cord
- Operates submerged or in-line
- 1/2" NPT
- Ceramic shaft
- Foam pre-filter included
- Three year limited warranty

Item No.	Description	Rated GPH	MSRP
728072	Mag Drive Pump	700	$115.95

MAG DRIVE PUMP 950 GPH

- 950 GPH maximum flow
- Max height 15'
- 10' grounded power cord
- Operates submerged or in-line
- 3/4" NPT
- Ceramic shaft
- Foam pre-filter included
- Three year limited warranty

Item No.	Description	Rated GPH	MSRP
728062	Mag Drive Pump	950	$141.95

MAG DRIVE PUMP 1200 GPH

- 1200 GPH maximum flow
- Max height 15'
- 10' grounded power cord
- Operates submerged or in-line
- 3/4" NPT
- Ceramic shaft
- Foam pre-filter included
- Three year limited warranty

Item No.	Description	Rated GPH	MSRP
728050	Mag Drive Pump	1200	$197.95

MAG DRIVE PUMP 1800 GPH

- 1800 GPH maximum flow
- Max height 22'
- 10' grounded power cord
- Operates submerged or in-line
- 3/4" NPT
- Ceramic shaft
- Foam pre-filter included
- Three year limited warranty

Item No.	Description	Rated GPH	MSRP
728080	Mag Drive Pump	1800	$224.95

MAG DRIVE PUMP 2400 GPH

- 2400 GPH maximum flow
- Max height 22'
- 10' grounded power cord
- Energy efficient

Item No.	Description	Rated GPH	MSRP
728085	Mag Drive Pump	2400	$272.95

- Operates submerged or in-line
- 1" NPT
- Ceramic shaft
- Filled with epoxy, not oil
- Pre-filter included
- Three year limited warranty

MAG DRIVE PUMPS REPLACEMENT IMPELLERS

Item No.	Description	MSRP
728248	Mag Drive Impeller for 190 GPH	$13.99
728250	Mag Drive Impeller for 250 GPH	$14.95
728252	Mag Drive Impeller for 350 - 500 GPH	$19.95
728256	Mag Drive Impeller for 700 GPH	$17.99
728258	Mag Drive Impeller for 950 GPH	$29.95
728260	Mag Drive Impeller for 1200 GPH	$26.99
728262	Mag Drive Impeller for 1800 GPH	$47.95
728264	Mag Drive Impeller for 2400 GPH	$55.95

MAG DRIVE PUMPS REPLACEMENT FILTERS & REPLACEMENT FITTINGS

Item No.	Description	MSRP
728230	Mag Drive Filter for 190 GPH	$5.19
728232	Mag Drive Filter for 250 - 700 GPH	$9.69
728240	Mag Drive Filter for 950 - 2400 GPH	$14.95
728268	Fitting for 250 - 700 GPH ½" NPT x ½" Barb	$9.95
728276	Fitting for 950 - 1800 GPH ¾" NPT x ¾" Barb	$9.95
728282	Fitting for 2400 GPH 1" NPT x 1" Barb	$9.95

ECOPLUS® PUMP FILTER BAGS

Item No.	Description	Bag Size	MSRP
728188	Pump Filter Bag - Small	6½" x 9"	$9.80
728190	Pump Filter Bag - Large	10" x 12½"	$11.50

A submersible pump is inserted into this filter bag to prevent sediment from clogging it. Use of the filter bag will prolong the life and reduce cleaning/maintenance of the pump. A must have for EVERY pump!

Small Filter Bag works with the following pumps: Eco 66, Eco 100 and Eco 132.

Large Filter Bag works with the following pumps: Eco 185, Eco 264, Eco 396, Eco 633, Mag Drive 250 & 350, Little Giant PE-1, LG 1, NK-1 and NK-2.

CONDENSATE PUMPS

NEW!

Item No.	Description	MSRP
728130	Condensate Pump - 120 Volt	$74.95
728135	Condensate Pump - 240 Volt	$87.95

These pumps are used as an accessory with air conditioners and dehumidifiers. Each pump comes with 20 foot 3/8" tube.

Condensate Pump is suitable for use with condensate from high efficiency condensing furnaces and boilers which produce acidic condensate. This rugged pump has 22 feet of lift, compared to the typical 20 feet. These pumps have a number of features and benefits including vibration dampening feet and motor mounts, metal hang tabs, four versatile inlet holes, an easy to understand indicator display, a simple float switch and check valve, and a pan pill dispenser.

Integrating these pumps into your system is easy. 1/4" inch quick connect terminals provide easy connection to the built in overflow switch. Three terminals are provided allowing the installer flexibility to connect air-handler shut-down and optional alarm as needed. Switch features SPDT isolated contacts ready for connection to building automation systems.

- Continuous duty 140 F°.
- Maximum inlet temperature 160 F°.

LITTLE GIANT® 500-APCP SUBMERSIBLE PUMP

NEW!

Item No.	Description	Rated GPH	MSRP
728503	500-APCP Submersible Pump	470	$176.99

Features a low-water intake and an innovative solid-state switch design which activates the pump at 2-3/8" and deactivates at 1-3/8". Pump discharge accepts a standard 3/4" garden hose.

- 470 GPH @ 1 ft.
- Operates submersed
- 115 Volt
- .5 amps
- 45 watts
- Manufacturer Item No. 519575
- 25' power cord
- One year limited warranty

LITTLE GIANT® PE-1 SUBMERSIBLE PUMP

Item No.	Description	Rated GPH	MSRP
727005	PE-1 Submersible Direct Drive Pump	170	$75.99

Small submersible epoxy encapsulated pump for commercial, industrial and home use. Applications include hydroponic systems, water gardens, ponds, etc. This compact 170 GPH pump features 1/4" MNPT discharge, 7' shut-off head capability, screened inlet and a 6' power cord. Pumps are not recommended for fuel oil transfer, aquariums and swimming pools.

- Inlet screen helps protect pump from debris
- 115 Volt
- 1/4" MNPT outlet accepts 1/2" I.D. flexible tubing
- 1/125 HP
- Impedance protected motor.
- .3 amps
- 36 watts
- Manufacturer Item No. 518200
- Side intake
- One year limited warranty

LITTLE GIANT® RS-5LL DIAPHRAGM SWITCH

Item No.	Description	MSRP
727045	Piggyback Diaphragm Switch	$73.95

The RS5-LL switch can be used anytime you have a basin usage for the pump. It works by diaphragm. If the water reaches a certain level, it will shut off the pump. The pump plugs into the switch. "On" level: 2"- 3". "Off" level: .5" - 1.5" when mounted to 5-MSP. For pumps up through 1/3HP or the following pumps, 5-MSP, 6-CIM-R, NK-1 & NK-2. 18' cord.

LITTLE GIANT® 1-ABS SUBMERSIBLE PUMP

Item No.	Description	Rated GPH	MSRP
727010	1-ABS Submersible Pump	205	$122.99

- Shallow-Pan Tank Style
- Designed for in-pan mounting
- 10' maximum lift
- 1/4" MNPT discharge
- Stainless steel shaft
- **Bottom intake**
- Integral float-activated switch
- 6' power cord with 3-prong molded plug
- Thermal overload protection
- Manufacturer Item No. 550515
- "On" in 1" & "Off" in 1/2" of water
- One year limited warranty

LITTLE GIANT® 1 SUBMERSIBLE PUMP

Item No.	Description	Rated GPH	MSRP
727015	1 Submersible Pump	205	$89.99

Permanently lubricated pumps for commercial, industrial, and home use where liquid must be transferred or recirculated. Applications include hydroponic systems, water gardens, ponds, aquariums, etc.

- Epoxy-coated aluminum housing
- Bottom inlet has snap-off screen for easy cleaning.
- Manufacturer Item No. 501003
- 1/4" MNPT outlet, with 90° elbow accessory, accepts 1/2" I.D. tubing.
- **Bottom intake**
- One year limited warranty

LITTLE GIANT® NK-1 SUBMERSIBLE PUMP

Item No.	Description	Rated GPH	MSRP
727020	NK-1 Submersible Pump	210	$91.99

Permanently lubricated pumps for commercial, industrial, and home use where liquid must be transferred or recirculated. Applications include hydroponic systems, water gardens, ponds, etc.

- Corrosion-resistant nylon housing
- Sump-type screened inlet.
- 1/4" MNPT outlet accepts 1/2" I.D. tubing.
- Thermally protected.
- **Bottom or side intake**
- Manufacturer Item No. 526003
- One year limited warranty

LITTLE GIANT® NK-2 SUBMERSIBLE PUMP

Item No.	Description	Rated GPH	MSRP
727025	NK-2 Submersible Pump	325	$109.99

Permanently lubricated pumps for commercial, industrial, and home use where liquid must be transferred or recirculated. Applications include hydroponic systems, water gardens, ponds, etc.

- 6' power cord
- Corrosion-resistant nylon housing
- Five position options
- 1/4" MNPT outlet accepts 1/2" I.D. tubing.
- Thermally protected.
- Manufacturer Item No. 527003
- **Bottom or side intake**
- One year limited warranty

LITTLE GIANT® PE - 2.5F - PW SUBMERSIBLE PUMP

Item No.	Description	Rated GPH	MSRP
727030	PE - 2.5F - PW Submersible Pump	475	$127.99

A premium pump at 475 GPH. Epoxy filled pump is compact in design, produces superior water flow and has corrosion resistant plastic housing. Ideal for the water gardening environment.

- Usages: Circulating ponds up to 800 gallons, fountain nozzles, biological filters
- 1 year limited warranty
- Corrosion resistant body designed for non-potable submersible use
- Maximum Pumping Height 13.4'
- 1/2" MNPT Discharge
- Accepts 3/4" ID Tubing
- **Side intake**
- Manufacturer Item No. 566633

LITTLE GIANT® 5-MSP SUBMERSIBLE PUMPS

Item No.	Description	Rated GPH	MSRP
727035	5 - MSP Submersible Pump - Blue	1200	$146.99
727050	5 - MSPR Submersible Pump - Black	1200	$146.99

Permanently lubricated utility pump includes garden hose adapter and removable inlet screen for easy cleaning. Lifetime oil supply. Pumps down to 1/8" (3.2 mm.).

- 1/6 HP thermally protected, shaded pole motor
- Epoxy-coated cast aluminum housing
- Bottom inlet has removable screen for easy cleaning
- Removes water down to 1/8"
- 1" FNPT outlet includes garden-hose adapter
- Manufacturer Item No. 505000
- **Bottom intake**
- One year limited warranty

LITTLE GIANT® 6 - CIM-R SUBMERSIBLE PUMP

Item No.	Description	Rated GPH	MSRP
727040	6 - CIM-R Sump Submersible Pump	2760	$196.99

Big John submersible sump pump for residential and light commercial use, the 6-CIM-R manual sump pumps provides efficient and reliable service. Pump features a 1-1/2" discharge with an 18' maximum head. Cast iron motor housing is oil-filled for lifetime lubrication and rapid heat dissipation. Poly carbonate cover and polypropylene volute-base. Garden Hose Adapter included for utility use. One year limited warranty.

- Mechanical shaft seal (stainless steel spring, nitrile parts, carbon and ceramic faces).
- Manual operation (pump can easily be converted to automatic operation using the RS-5, VDS1006, or RFSN-9 switches)
- 1/3 HP, 115 Volt, 10' Power Cord
- Screened inlet
- Stainless steel screws, bolts, and handle
- Oil filled motor housing for lifetime lubrication and rapid heat dissipation
- Epoxy coated cast iron motor housing for corrosion and rust resistance
- Thermal overload protection
- 1-1/2" MNPT x 1-1/4" FNPT (31.7mm) Reducer Bushing
- Manufacturer Item No. 506271
- **Bottom intake**

MAXI-JET WATER PUMPS

Item No.	Description	GPH	MSRP
727075	Maxi-Jet 500 Pump	132	$27.95
727080	Maxi-Jet 750 Pump	198	$34.95
727085	Maxi-Jet 1000 Pump	264	$36.95

Energy-efficient Maxi-Jet Pumps are very durable. With a sealed casing and superior internal design, it ensures that they won't overheat when ran dry, unlike most other pumps. They feature 3-suction cup mounting to ensure that the pump is stable in your reservoir. Equipped with dual pre-filters and a simplistic design, make the Maxi-Jet pumps virtually maintenance free and long lasting. Made in Italy using the finest quality materials.

MAXI-JET UTILITY WATER PUMPS

Item No.	Description	GPH	MSRP
727091	Maxi-Jet 900 Pump	247	$45.29
727093	Maxi-Jet 1800 Pump	474	$91.29
727094	Maxi-Jet 3000 Pump	775	$132.95

Complete with all fittings to run externally with in-line plumbing or in submerged applications. Innovative adjustable intake design provides precise flow adjustment to get the exact amount of water movement required in your system. Superior engineering make the Marineland Submersible Utility Pumps highly efficient; pumping more water while using less energy and running extremely cool. Equipped with an internal thermal safety switch that eliminates the possibility of over-heating. Made in Italy using the finest quality materials.

REEFLO SNAPPER WATER PUMP

Item No.	Description	Watts	GPH	MSRP
729201	Snapper Pump	98	2500	$348.00

Provide the ultimate in energy-efficient, yet powerful pumps with this adjustable flow model. The adjustable flow regulator can actually be set at any level you want in that range for precisely the flow rate necessary for your job. Even at its peak, the Snapper only requires 98 watts of power: an amazing energy value right around that of a standard light bulb!

- Inline use only - NOT Submersible
- Max Head 12 feet
- Motor Type: Hubbel
- Units are pre-wired with an 8` cord and molded 115V plug
- Housing is molded of PVC plastic for added efficiency
- Manufacturer Warranty: 3 years from date of purchase
- Amps: .8
- Ports are 2" FNPT suction and 1-1/2" FNPT discharge.
- Dimensions (L x W x H): 11in x 6.57in x 7in

REEFLO DART WATER PUMPS

Item No.	Description	Watts	GPH	MSRP
729202	Dart Pump	145	3740	$449.00

The Dart™ is the quietest pump on the market. Our low speed, 1/8 HP Hubbel® motors have extremely low heat transfers.

- Inline use only - NOT Submersible
- Max Head 12 feet
- Minimal heat transfer
- Less than half the watt draw of comparable submersible pumps!
- Ports are 2" FNPT suction and 1.5" FNPT discharge.
- Units are pre-wired with an 8` cord and molded 115V plug.
- Housing is molded of PVC plastic for added efficiency.
- Quiet operation

REEFLO BARRACUDA WATER PUMPS

Item No.	Description	Watts	GPH	MSRP
729203	Barracuda Pump	234	4300	$579.00

The Barracuda™ is our energy efficient entry-level pump for applications requiring moderate head pressure and high flow rates. Ideal applications for this unit are 180-350 gallon tanks with sump return systems requiring a minimum of 10 feet static head. Using a 1/4 horsepower Baldor Motor manufactured in the USA. 3 year manufacturer warranty.

- Inline use only - NOT Submersible
- Max Head 18 feet
- Less than half the watt draw of comparable submersible pumps!
- Ports are 1.5" FNPT suction and 1.5" FNPT discharge.
- Units are pre-wired with an 8` cord and molded 115V plug.
- Housing is molded of PVC plastic for added efficiency.
- Quiet operation
- Rebuildable motors.

REEFLO HAMMERHEAD WATER PUMPS

Item No.	Description	Watts	GPH	MSRP
729204	Hammerhead Pump	340	5800	$599.00

The Hammerhead™ is the most powerful pump in its class. This energy efficient pump is ideal for 300-500 gallon reservoirs with sump return systems requiring a minimum of 15 feet static head. Using a 1/3 horsepower Baldor® TEFC Motor manufactured in the USA. 3 year manufacturer warranty.

- Inline use only - NOT Submersible
- Max Head 23 feet
- Less than half the watt draw of comparable submersible pumps!
- Ports are 1.5" FNPT suction and 1.5" FNPT discharge.
- Units are pre-wired with an 8` cord and molded 115V plug.
- Housing is molded of PVC plastic for added efficiency.
- Quiet operation
- Rebuildable motors.

AIR MANIFOLDS - PLASTIC

Item No.	Description	Use Tube Size - Inlet	Use Tube Size - Outlet	MSRP
728446	4 Outlet Air Manifold	1/4" ID	3/16" ID	$1.49
728447	6 Outlet Air Manifold	3/8" ID	3/16" ID	$2.95
728448	8 Outlet Air Manifold	3/8" ID	3/16" ID	$3.49
728449	10 Outlet Air Manifold	3/8" ID	3/16" ID	$4.95

AIR MANIFOLDS - CHROME

High quality chrome air manifolds. Each outlet has individually controlled valves.

Item No.	Description	Use Tube Size - Inlet	Use Tube Size - Outlet	MSRP
728460	4 Valve Air Manifold	1/4" ID	3/16" ID	$5.49
728465	6 Valve Air Manifold	3/8" ID	3/16" ID	$6.99
728470	8 Valve Air Manifold	3/8" ID	3/16" ID	$8.99

DUAL DIAPHRAGM AIR PUMP & REBUILD KIT

Item No.	Description	GPH	Use Tube Size	MSRP
728040	Dual Diaphragm Air Pump	396	3/16" ID	$64.98
728043	Dual Diaphragm Air Pump Rebuild Kit			$19.98

The General Hydroponics® Dual Diaphragm air pump is extremely quiet and the only air pump in the world manufactured exclusively for hydroponics systems. This high output pump has four adjustable ¼" outputs that can be teed off to power up to twelve air driven hydroponics growing systems such as the WaterFarm. In addition, growers who use our Dual Diaphragm air pump can use it to reliably oxygenate their reservoir with air stones. 3 psi, 320 gph (20 L/min).

Rebuild kit includes two replacement diaphragms and two replacement lock nuts.

Helpful hint: Air pumps should always be placed above the reservoir water level. This prevents water from flowing back into the air pump when the pump shuts off.

ECOPLUS® COMMERCIAL AIR PUMPS

Item No.	Description	PSI	Use Tube Size	MSRP
728450	Commercial Air 1 - 18W - Single outlet 38 L/min	2.9	1/4" ID	$53.49
728455	Commercial Air 3 - 35W - Single outlet 65 L/min	3.9	3/8" ID	$73.49
728457	Commercial Air 5 - 80W - Single outlet 88 L/min	4.2	3/8" ID	$92.99
728459	Commercial Air 7 - 280W - Single outlet 200 L/min	5.1	1/2" ID	$142.99

- Convenient to operate without oil or much noise.
- Cylinders and pistons are made of excellent materials, making the pump strong, durable.
- Will meet many requirements of pumps with air dividers from four to twenty-two outlets.
- Widely used to provide oxygen in aquariums, fish farms and hydroponic systems. One year warranty.

ECOPLUS® AIR PUMPS

Item No.	Description	PSI	Use Tube Size	MSRP
728350	Eco Air 8 - Eight Outlets - 24 watts (variable control)	2.2	3/16" ID	$64.49
728355	Eco Air 4 - Four Outlets - 12 watts (variable control)	1.7	3/16" ID	$33.49
728360	Eco Air 2 - Two Outlets - 6 watts (variable control)	1.7	3/16" ID	$13.95
728365	Eco Air 1 Plus - One Outlet 3 watts	1.7	3/16" ID	$8.99

Eco Air series pumps are very quiet, yet extremely powerful. They are long lasting and offer a one year warranty. Controllable variable output on some models.

MODEL	ECO AIR 8	ECO AIR 4	ECO AIR 2	ECO AIR 1
VOLT	110V	110V	110V	110V
FREQ	60Hz	60Hz	60Hz	60Hz
POWER (W)	24	12	6	2.5
OUTPUT (L/MIN)	20	9	4.5	2
OUTPUT (G/MIN)	5.2	2.3	1.2	.52
PRESSURE (PSI)	2	1.75	1.75	3
WEIGHT (LBS)	5.0	2.6	1.3	.39
DIMENSIONS (INCH)	4.5 x 7 x .125	7.75 x 5.7 x 4.2	6.5 x 3.75 x 3.4	3.4 x 1.8 x 2

REPLACEMENT PARTS FOR ECOPLUS® AIR PUMPS

Item No.	Description	MSRP
728366	Eco Air 1 Plus Membrane & Valve	$2.50
728361	Eco Air 2, 4 & 8 Membrane & Valve	$4.99

Replacement parts for the EcoPlus® Air Pumps. Each pump uses the amount of diaphragms that is has outlets. For example the Eco Air 4 has 4 diaphragms and valves. We suggest you replace all diaphragms at the same time.

ECOPLUS® FLEXIBLE AIR DIFFUSERS

Item No.	Description	Use Tube Size	MSRP
728435	2' Flexible Air Diffuser	3/16" ID	$4.59
728440	3' Flexible Air Diffuser	3/16" ID	$6.19
728445	4' Flexible Air Diffuser	3/16" ID	$7.95

These air "hoses" are flexible and unbreakable. They provide excellent aeration. To clean, just wipe off under running water.

ECOPLUS® AIR STONES

Item No.	Description	Use Tube Size	MSRP
728405	Large Round Air Stone	1/4" ID	$4.99
728410	Medium Round Air Stone	1/4" ID	$2.95
728415	Small Round Air Stone	1/4" ID	$1.95
728420	EcoPlus® 8" Air Stone	3/16" ID	$1.95
728425	EcoPlus® 6" Air Stone	3/16" ID	$1.49
728430	EcoPlus® 4" Air Stone	3/16" ID	$1.29

ECOPLUS® AQUARIUM & RESERVOIR THERMOMETER

Item No.	Description	MSRP
728565	EcoPlus® Aquarium & Reservoir Thermometer	$2.49

- Glass tube precisely made of German material.
- Suction cup to stick to the inside of an aquarium or reservoir.
- Thermometer floats in water.

MICRO-PORE™ AIR DIFFUSERS

Item No.	Description	Use Tube Size	MSRP
728500	Single Air Diffuser	3/16" ID	$20.95
728506	Single XL Diffuser	3/16" ID	$26.95
728505	Double Air Diffuser	1/4" ID	$36.95
728507	Double XL Diffuser	1/4" ID	$42.95
728508	"Hog" 2X Diffuser	1/4" ID	$41.95
728509	"Boss Hog" 2 X Diffuser	1/4" ID	$64.95

- Kiln fired ceramic material will not react with nutrients solutions.
- Micro-Pore design produces smaller, more prolific bubbles.
- Will not clog or break down like other compressed silicates diffusers.
- Extends the life of nutrient solutions for all types of hydroponics.

OXYGEN SHIELD AIR DIFFUSERS

NEW! industry exclusive

Item No.	Description	MSRP
728510	Oxygen Shield 1 Air Diffuser (10-30 Gal)	$28.99
728511	Oxygen Shield 2 Air Diffuser (20-40 Gal)	$38.99
728512	Oxygen Shield 3 Air Diffuser (40-70 Gal)	$49.99
728513	Oxygen Shield 5 Air Diffuser (5 Gal Bucket)	$16.99

PRODUCT	OS 1	OS 2	OS 3	OS 5
Tank Size in Gallons	10 - 30	20 - 40	40-70	5
Eco 1 Pump	No	No	No	Yes
Eco 2 Pump	Yes	No	No	Yes
Commercial 1	Yes	Yes	No	Yes
Commercial 3	Yes	Yes	Yes	Yes
Commercial 5	Yes	Yes	Yes	Yes
Commercial 7	Yes	Yes	Yes	Yes
Dimensions (inches)	11 x 14	15 x 19	23 x 27	9 diameter

OXY-GEN GENERATOR

Item No.	Description	MSRP
727200	Oxy-Gen Generator	$1,499.00

- Increased oxygen levels.
- Optimizes root system.
- Plug n' Play – in 5 minutes or less.
- Uses less than 1 amp.
- No plumbing necessary.

Includes: Microprocessor Controller
- Mag Drive Pump
- Contact chamber w/ proprietary plates
- Class II transformer
- Instructions

AERATOR

NEW LOWER PRICES

Item No.	Description	Watts	Reservoir Size	MSRP
728525	Ario 2 Aerator	3.5	13 - 26 gal	$18.39
728530	Ario 3 Aerator	6	26 - 40 gal	$19.95
728535	Ario 4 Aerator	9	40 - 80 gal	$21.95

Hydroponic growers know proper oxygenation of your water will greatly improve the quality of your crop. These new submersible aerators were designed as a quality alternative to what is currently available. The Ario line of aerators are so powerful they actually create water movement within the reservoir. Everything you need to create optimum oxygen levels is packaged nicely in one box. These silent aerators are manufactured in Italy and have a one year warranty.

AQUA HEAT™ TITANIUM RESERVOIR & AQUARIUM HEATERS

Item No.	Description	MSRP
728581	Aqua Heat™ Titanium Reservoir & Aquarium Heater - 200 watt	$34.49
728582	Aqua Heat™ Titanium Reservoir & Aquarium Heater - 300 watt	$36.49

- Heater tube is fully submersible.
- Automatic electronic heater.
- Double heating tube.
- Very durable and reliable.
- Easy temperature control.
- Ideal for saltwater and freshwater.
- Temp range: 68°F (20°C) to 93°F (34°C).
- One year warranty.

STEALTH PRO HEATERS

NEW!

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Item No.	Description	Watts	MSRP
728572	Stealth Pro Heater	100	$32.95
728574	Stealth Pro Heater	150	$33.95
728575	Stealth Pro Heater	200	$35.95
728576	Stealth Pro Heater	250	$37.95
728578	Stealth Pro Heater	300	$45.95

- Shatterproof injection-molded thermal plastic casing protects against wear and damage.
- Bi-color LEDs with Optic System illuminates temperature selection dial - glows red when heating, green when temp is OK.
- Mesh Heating Element with mica core, coupled with epoxy fill ensures the most efficient heat transfer and durability.
- Safety shut-off shuts down the heater if it is removed from the water. The unit automatically restarts when it's returned to the water.
- Certified accuracy to +/-1 degree Fahrenheit.
- Lifetime limited warranty.

ECOPLUS® WATER CHILLERS

The EcoPlus® Chillers are suitable for use in reservoirs, hydroponic systems & fresh or saltwater aquariums. Each chiller provides a high performance titanium heat exchanger for optimum performance and corrosion resistance. High quality made compressor is extremely efficient and reliable. The micro computer with digital LCD display allows for easy operation. Use with a pump filter bag (product #728188 or # 728190). One year limited warranty on all EcoPlus® chillers.

***Allow all Chillers to set upright, on their feet for 30 minutes prior to plugging in.**

ECOPLUS® 1/10 HP CHILLER

Item No.	Description	MSRP
728695	EcoPlus® 1/10 HP Chiller	$432.95
728715	Replacement 1/10 HP Chiller Fitting Kit	$7.95

- Fittings: 1/2"
- Dimensions: 10.5" W x 12" D x 14" H
- Weight: 31 lbs.
- Voltage: 120V/60Hz
- Wattage: 280
- Amps: 2.3
- BTU: 950
- Capable of Chilling: 93 gal - 10° F; 35 gal - 30° F
- Pump Size: Minimum 132 GPH; Maximum 264 GPH

ECOPLUS® 1/4 HP CHILLER

Item No.	Description	MSRP
728700	EcoPlus® ¼ HP Chiller	$532.95
728720	Replacement ¼ HP Chiller Fitting Kit	$9.95

- Fittings: 3/4"
- Dimensions: 13" W x 15" D x 16" H
- Weight: 48.5 lbs.
- Voltage: 120V/60Hz
- Wattage: 480
- Amps: 4
- BTU: 2200
- Capable of Chilling: 170 gal - 10° F; 100 gal - 30° F
- Pump Size: Minimum 633 GPH; Maximum 1056 GPH

ECOPLUS® 1/2 HP CHILLER

Item No.	Description	MSRP
728702	EcoPlus® ½ HP Chiller	$958.95
728725	Replacement ½ HP Chiller Fitting Kit (No fuse)	$11.95

- Fittings: 1"
- Dimensions: 15" W x 18.5" D x 15" H
- Weight: 68 lbs.
- Voltage: 120V/60Hz
- Wattage: 540
- Amps: 4.5
- BTU: 5400
- Capable of Chilling: 320 gal - 10° F; 220 gal - 30° F
- Pump Size: Minimum 750 GPH; Maximum 1200 GPH

ECOPLUS® 1 HP CHILLER

Item No.	Description	MSRP
728706	EcoPlus® 1 HP Chiller	$1,595.00
728728	Replacement 1 HP Chiller Fitting Kit (No fuse)	$14.95

- Fittings: 1"
- Dimensions: 16.5" W x 20.25" D x 19" H
- Weight: 88 lbs.
- Voltage: 120V/60Hz
- Wattage: 1080
- Amps: 9
- BTU: 12,000
- Capable of Chilling: 1000 gallons - 10° F; 500 gallons - 30° F
- Pump Size: Minimum 1584 GPH; Maximum 2200 GPH

***Allow all Chillers to set upright, on their feet for 30 minutes prior to plugging in.**

WATER ALARM WITH REMOTE SENSOR

Item No.	Description	MSRP
740090	Water Alarm with Sensor	$24.95

- Warns of leaks and overflows in reservoirs, aquariums or anywhere there is a potential for leaks.
- Low battery signal tells user when it's time to replace the battery.
- Alerts user within hearing range that water has reached desired level when used to monitor the filling of pools, reservoirs, aquariums and more.
- Circuit test bar ensures system is working.
- An ideal backup system for sump and bilge pumps in residential, commercial and marine applications.
- Sensor and alarm can be placed up to 6 feet apart.
- Loud 85 dB (decibel buzzer). Sounds for up to 3 days.
- One year warranty.

HydroLogic™ PURIFICATION SYSTEMS

Ph: 888-426-5644
www.HydroLogicSystems.com

pure water's not **magic**
it's **logic**

REVERSE OSMOSIS SYSTEMS

	NGW ITEM CODE	PRODUCT WATER FLOW RATE ✱	REDUCES PPM (BY 95% +)	REMOVES CHLORINE	REMOVES CHLORAMINES	REMOVES SEDIMENT & DIRT	REMOVES IRON	REMOVES SULFUR	INLET TUBING SIZE	PRODUCT TUBING SIZE	WASTE TUBING SIZE
MERLIN-GARDEN PRO	728840	750 GPD, 30 GPH	Y	Y	partially	Y	low levels	low levels	1/2"	3/8"	3/8"
STEALTH-RO100	728800	100 GPD, 4 GPH	Y	Y	partially	Y	low levels	low levels	3/8"	1/4"	1/4"
STEALTH-RO200	728820	200 GPD, 8 GPH	Y	Y	partially	Y	low levels	low levels	3/8"	1/4"	1/4"
ECO-SPRING	728990	40 GPD	Y	Y	partially	Y	low levels	low levels	1/4"	3/8"	1/4"

DECHLORINATOR/SEDIMENT FILTERS

	NGW ITEM CODE	PRODUCT WATER FLOW RATE	REDUCES PPM (BY 95% +)	REMOVES CHLORINE	REMOVES CHLORAMINES	REMOVES SEDIMENT & DIRT	REMOVES IRON	REMOVES SULFUR	INLET TUBING SIZE	OUTLET TUBING SIZE	WASTE TUBING SIZE
BIG BOY	728985	420 GPH, 7 GPM	N	Y	partially	Y	N	N	1" port	1" port	none
TALL BLUE	728860	(pre-filter for Merlin-GP only)	N	Y	partially	Y	N	N	1/2"	1/2"	none
TALL BOY	728890	120 GPH, 2 GPM	N	Y	partially	Y	N	N	3/8"	3/8"	none
SMALL BOY	728875	60 GPH, 1 GPM	N	Y	partially	Y	N	N	1/4"	1/4"	none

✱ Flow rates of RO systems are based on source water at 60 PSI, 77°F, 500 PPM
Minimum inlet pressure is 40 PSI, maximum is 80 PSI.

KEY	
GPD =	Gallons Per Day
GPH =	Gallons Per Hour
GPM =	Gallons Per Minute
G =	Gallons

*** Dechlorinator/Sediment Filters do not produce waste water.*

REPLACEMENT & UPGRADE FILTERS

	NGW ITEM CODE	FILTER REPLACEMENT SCHEDULE	REDUCES PPM (BY 95% +)	REMOVES CHLORINE	REMOVES CHLORAMINES	REMOVES SEDIMENT & DIRT	REMOVES IRON	REMOVES SULFUR	FOR WELL WATER	FOR CITY WATER
Big Boy - Carbon Filter - Green - Coconut - 20"x4.5"	728950	25,000 G	N	Y	partially	N	N	N	Y	Y
Big Boy - Sediment Filter - Pleated - 20"x4.5"	728955	clean regularly, change annually	N	N	N	Y	N	N	Y	Y
Eco-Spring 4-Stage Main Cartridge	728965	change annually	Y	Y	partially	Y	low levels	low levels	Y	Y
Eco-Spring Post Remineralization/Carbon Filter	728970	6 -12 months	N	Y	partially	N	N	N	Y	Y
KDF85/Catalytic Carbon upgrade filter - 10"x2.5" for Stealth-RO100/200 & Small Boy	728975	6,000 G = Small Boy 2,000 G = Stealth-RO	N	Y	Y	N	low - medium levels	low - medium levels	Y	Y
KDF85/Catalytic Carbon upgrade filter - 20"x2.5" for Tall Boy & Tall Blue	728980	15,000 G = Tall Boy 6,000 G = Tall Blue	N	Y	Y	N	low - medium levels	low - medium levels	Y	Y
KDF85/Catalytic Carbon upgrade filter - 20"x4.5" for Big Boy	728960	50,000 G	N	Y	Y	N	low - medium levels	low - medium levels	Y	Y
Merlin-Garden Pro Carbon Pre-Filter - Green - Coconut	728845	1,500 G	N	Y	partially	Y	N	N	Y	Y
Merlin-Garden Pro RO Membrane Element	728855	6 months - 2 years	Y	N	N	N	low levels	low levels	Y	Y
Merlin-Garden Pro Sediment Pre-filter for non-chlorinated water sources	728850	1,500 G (approx.)	N	N	N	Y	N	N	Y	N
Small Boy Sediment Filter - 10"x2.5"	728885	3,000 G (approx.)	N	N	N	Y	N	N	Y	Y
Stealth-RO/Small Boy Carbon Filter - Green - Coconut - 10"x2.5"	728805	3,000 G = Small Boy 1,250 G = Stealth-RO	N	Y	partially	N	N	N	Y	Y
Stealth-RO100/200 RO Membrane Element	728815	6 months - 2 years	Y	N	N	N	low levels	low levels	Y	Y
Stealth-RO100/200 Sediment Filter - Pleated - 10"x2.5"	728810	clean regularly, change annually	N	N	N	Y	N	N	Y	Y
Tall Blue/Tall Boy Carbon Filter - Green - Coconut - 20"x2.5"	728865	7,500 G = Tall Boy 4,500 G = Tall Blue	N	Y	partially	N	N	N	Y	Y
Tall Blue/Tall Boy Sediment Filter - 20"x2.5"	728870	7,500 G (approx.) = Tall Boy 4,500 (approx.) = Tall Blue	N	N	N	Y	N	N	Y	Y

Contaminant	Which Filter Works Best?	
	Reverse Osmosis	Carbon/Sediment Filters
Chlorine & Chloramines	✓	✓*
Sediment & Rust	✓	✓
Volatile Organic Compounds	✓	✓
Removes 95% + PPM	✓	
Nitrates & Pesticides	✓	
Removes 98% + Bacteria	✓	
Hardness (Excess Calcium & Magnesium)	✓	
Helps Stabilize PH	✓	
Iron, Sulfur & Fluoride	✓	

* Removes some chloramines. Use KDF85 to remove all chloramines.

Water Purification 101:

How do you know which type of filter to use? Here are few possible examples of how to choose the right type of filter. This filter selection guide shows most of the common uses of filters for existing contaminants.

HydroLogic™ PURIFICATION SYSTEMS

HYDRO-LOGIC™ STEALTH RO 100

Item No.	Description	MSRP
728800	Hydro-logic™ Stealth 100 RO	$225.00

Hydro-Logic is proud to introduce new upgrades to the Stealth-RO 100 with these now standard features:

Green Coconut Carbon filter included with all units. Pressure Gauge to monitor performance. Optional flow restrictor to save drain water included.

Produces up to 100 GPD (gallons per day) of ultra-pure, low PPM water. Removes 98%+ of chlorine and contaminants. Wastes approximately 25% less water than other RO Systems. Everything included in the box for quick hook-up. Customized for gardening and hydroponics. *Based on 77° F 60 psi, 550 ppm inlet water.

Includes: 3-Stage RO Unit, 1 RO Membrane, Carbon Filter, Cleanable Sediment Filter, Automatic Shut-Off Cartridge, Wall Mountable Metal Bracket, Garden Hose Connector, Inline Shut-Off, 8 ft. RO & Drain Line, 5 ft. Inlet Line, Filter Wrench, Instructions. Unit size: 15" x 14" and weight: 8.6 lbs. Limited 1 year warranty.

HYDRO-LOGIC™ STEALTH RO 200

Item No.	Description	MSRP
728820	Hydro-logic™ Stealth 200 RO	$315.00

Hydro-Logic is proud to introduce new upgrades to the Stealth-RO 200 with these now standard features:

Green Coconut Carbon filter included with all units. Pressure Gauge to monitor performance. Optional flow restrictor to save drain water included.

Produces up to 200 GPD (gallons per day) ultra-pure, low PPM water. Removes 98%+ of chlorine and contaminants. Wastes approximately 25% less water than other RO Systems. Everything included in the box for quick hook-up. Customized for gardening and hydroponics. *Based on 77° F 60 psi, 550 ppm inlet water

Includes: 4-Stage RO Unit, 2 RO Membranes, Carbon Filter, Cleanable Sediment Filter, Automatic Shut-Off Cartridge, Wall Mountable Metal Bracket, Garden Hose Connector, Inline Shut-Off, 8 ft. RO & Drain Line, 5 ft. Inlet Line, Filter Wrench, Instructions. Unit size: 16.5'' x 14" and weight: 9.8 lbs. Limited 1 year warranty.

HYDRO-LOGIC™ STEALTH REPLACEMENT FILTERS

Item No.	Description	MSRP
728805	Hydro-logic™ Stealth & Small Boy Green Carbon Filter	$16.50
728810	Hydro-logic™ Stealth Sediment Filter	$14.50
728815	Hydro-logic™ Stealth Membrane	$83.00
728975	Hydro-logic™ Stealth KDF85 Carbon Filter	$39.00

KDF85 Filter is ideal for well water users with iron and sulfur and city water users with chloramines.

HYDRO-LOGIC™ STEALTH ULTRA-VIOLET STERILIZER KIT & PRESSURE BOOSTER PUMP

Item No.	Description	MSRP
728922	Hydro-logic™ Stealth UV Sterilizer Kit	$99.00
728897	Pressure Booster Pump For Stealth Units	$189.00

Ultra Violet Sterilizer add on for either Stealth-RO units. Kills any bacteria, viruses or biological contaminants in product water. Great for well or surface water sources.

Th pressure booster pump is designed to be installed before the Stealth-RO to boost the inlet pressure. There needs to be at least 40 psi and up to 80 psi of inlet pressure for the Stealth-RO to function properly. People on wells and other situations of low pressure can benefit greatly from this pump. It boosts the pressure significantly, allowing the Stealth-RO to run with higher flow and efficiency while having better TDS removal. The pump is designed for long service life and runs very quietly.

HYDRO-LOGIC™ STEALTH & SMALL BOY FLOAT VALVE

Item No.	Description	MSRP
728912	Hydro-logic™ Stealth Float Valve 1/4"	$19.00

This valve comes with a 1/4" quick connect fitting. Use this float valve to adjust water level and can be mounted horizontally or vertically. The kit allows you to fill a reservoir or tank, unattended, to your desired water level.

QUICK CONNECT FITTINGS

Item No.	Description	MSRP
728933	1/4" QC x Plastic Garden Hose Connector	$6.50
728934	3/8" QC x Plastic Garden Hose Connector	$6.50

728933 is the replacement feed valve for the Small Boy system.

728934 is the replacement feed valve for the Stealth RO system as well as the Tall Boy system.

QUICK CONNECT FITTINGS FOR STEALTH RO & SMALL BOY SYSTEMS

728937

728938

728939

Item No.	Description	MSRP
728937	1/4" QC Inline Shut Off Valve	$5.00
728938	1/4" QC Union Connector	$4.75
728939	2-Way Splitter 1/4"	$5.75

Item No. 728937: 1/4" Quick Connect Inline Shut Off Valve. This is used to shut off feed or outlet line to system. This valve is for the Stealth RO system as well as the Small Boy system.

Item No. 728938: 1/4" Quick Connect Union Connector. This is to connect 2 lengths of equal sized tubing together for the Stealth RO system as well as the Small Boy system.

Item No. 728939: 2 Way Splitter 1/4". This is a "y" splitter for multiple reservoirs for the Stealth RO system as well as the Small Boy system.

HYDRO-LOGIC™ MERLIN GARDEN PRO RO

Item No.	Description	MSRP
728840	Hydro-logic™ Merlin GP	$597.95

Produces 30 gallons per hour or 750 gallons per day of ultra pure, low ppm water. Removes 95%+ of chlorine, hardness (calcium and magnesium), excessive minerals (iron), and all other contaminants. Wastes approximately 25% less drain water than other RO systems on the market. Everything included in the box to start producing bottled quality water for your plants. Exclusive configuration for hydroponics and gardening, not available anywhere else! * Based on 77° 50 psi, 750 ppm feed water. 728845 is for chlorinated water sources and 728850 is for non chlorinated water sources.

Includes: High-Flow Reverse Osmosis Unit with 1 carbon pre-filter & 2 RO membranes, inlet pressure gauge, garden hose connector & 3.8" inline shut-off, 12.5' RO line, 4.5' feed line, 4.5' drain line, instructions. Unit size: 10" x 17" x 20" and weight: 26 lbs. Limited 3 year (residential), 1 year (commercial) warranty.

HYDRO-LOGIC™ MERLIN GP REPLACEMENT FILTERS

728845

728850

728855

Item No.	Description	MSRP
728845	Hydro-logic™ Merlin GP Green Carbon Filter	$32.50
728850	Hydro-logic™ Merlin GP Sediment Filter	$23.00
728855	Hydro-logic™ Merlin GP Membrane	$142.00

HYDRO-LOGIC™ PRESSURE BOOSTER PUMP & TDS INLINE MONITOR FOR MERLIN GP

728895

728900

Item No.	Description	MSRP
728895	Pressure Booster Pump For Merlin GP	$329.00
728900	TDS Inline Monitor	$75.00

This pump is designed to be installed before the Merlin-Garden Pro to boost the inlet pressure. There needs to be at least 40 psi and up to 80 psi of inlet pressure for the Merlin-Garden Pro to function properly. People on wells and other situations of low pressure can benefit greatly from this pump. It boosts the pressure up to 70 psi allowing the Merlin-Garden Pro to run with higher flow and efficiency while having better TDS removal. The 5 diaphragm pump, specifically design for the Merlin, is a workhorse but runs quietly. Comes with 120v cord and 1/2" quick connect fittings.

Highly efficient and accurate due to its advanced microprocessor technology. Auto-Off function conserves battery power. The unit shuts off automatically after 20 seconds. Dual range - measures from 0-999 ppm, with a resolution of 1 ppm. From 1000 to 9990 ppm, the resolution is in 10 ppm increments, indicated by a blinking image. Comes factory calibrated. Comes equipped with 3/8" & 1/2" Quick Connect T-fittings for Merlin Garden Pro™ or Tall Blue-Merlin™ for quick install. Measure the untreated water coming in vs. the purified water going out of your reverse osmosis system at any time. Limited 3 year warranty.

HYDRO-LOGIC™ FLOAT KIT FOR MERLIN GARDEN PRO

Item No.	Description	MSRP
728910	Hydro-logic™ Float Kit For Merlin GP	$42.00

This kit consists of a float valve with a 3/8" quick connect fitting and adjustable water level that can be mounted horizontally or vertically. Also included is an automatic shut-off cartridge which help the Merlin-Garden Pro shut off both RO and drain lines. The kit allows you to fill a reservoir or tank, unattended, to your desired water level.

HYDRO-LOGIC™ MERLIN GP ULTRA-VIOLET STERILIZER KIT & LECTRONIC SHUT OFF KIT

728920

728951

Item No.	Description	MSRP
728920	Hydro-logic™ Merlin GP UV Sterilizer Kit (SO)	$99.95
728915	Electronic Shut Off Kit for Merlin GP	$149.00

Ultra Violet Sterilizer add on for the Merlin Garden Pro unit. Kills any bacteria, viruses, or biological contaminants in product water. Great for well or surface water sources.

This kit includes: Float valve, solenoid valve, electric float switch and transformer. Allows 100% shut off of inlet water and complete control of your water level.

HYDRO-LOGIC™ GREEN DRAIN ELBOW FOR MERLIN GP

Item No.	Description	MSRP
728944	Merlin GP Green Drain Elbow 3/8"	$19.00

Merlin-Garden Pro Eco Green drain elbow - 3/8" QC replaces standard Merlin-GP black drain elbow to save 25% of the drain water. Green with 3/8" QC fitting

HYDRO-LOGIC™ 3/8" STEM X 1/4" QUICK CONNECT STRAIGHT

Item No.	Description	MSRP
728907	3/8" Stem x 1/4" Quick Connect Straight	$3.50

The 3/8" Stem x ¼" Quick Connect Straight is used and to reduce a 3/8" quick connect fitting down to ¼". This is mainly used on the Flowmaster to make it's 3/8" fitting reduce to 1/4" and make it compatible with the Small Boy.

HYDRO-LOGIC™ FLOWMASTER FLOW METER 3/8"

Item No.	Description	MSRP
728905	Flowmaster Flow Meter	$54.00

The Flowmaster measures much of filtered water that has gone through the system and alerts you when it's time to change filters. You can program in the filter capacity and when you reach the target number of gallons, the Flowmaster beeps. No more guessing when your filter's are past their useful life. Ensures your system at its peak efficiency for removing contaminants. High flow model ranges from 0.2 GPM to 2.0 GPM flow rate and comes with 3/8" quick connect fittings for Merlin-Garden Pro and Tall Boy (use 2 pieces of 728907 to convert for use with Small Boy).

HYDRO-LOGIC™ PRESSURE GAUGE WITH GARDEN HOSE CONNECTOR

Item No.	Description	MSRP
728946	Pressure Gauge with Hose Connector (SO)	$21.00

Pressure gauge with female garden hose connector.

Allows one to measure line pressure to determine if a booster pump or pressure regulator in necessary. Diagnoses flow problems with RO filters.

QUICK CONNECT FITTINGS FOR MERLIN GARDEN PRO & TALL BLUE SYSTEMS

Item No.	Description	MSRP
728932	1/2" QC x Garden Hose Connector	$11.00
728935	1/2" QC Inline Shut Off Valve	$7.50
728936	1/2" QC Union Connector	$5.75

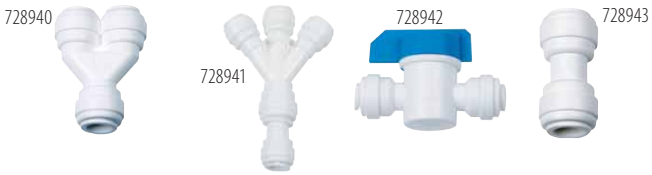
Item No. 728932: 1/2" Quick Connect x Garden Hose Connector - Feed Valve. This is the replacement feed valve for the Merlin GP RO system as well as the Tall Blue system.

Item No. 728935: 1/2" Quick Connect Inline Shut Off Valve. This is used to shut off feed or outlet line to system. This valve is for the Merlin GP RO system as well as the Tall Blue system.

Item No. 728935: 1/2" Quick Connect Union Connector. This is to connect 2 lengths of equal sized tubing together for the Merlin GP RO system as well as the Tall Blue system.

QUICK CONNECT FITTINGS FOR MERLIN GARDEN PRO & TALL BOY SYSTEMS

Item No.	Description	MSRP
728940	3/8" QC 2-Way Splitter	$6.25
728941	3/8" QC 3-Way Splitter	$12.00
728942	3/8" QC Inline Shut Off Valve	$6.25
728943	3/8" QC Union Connector	$5.00



Item No. 728940: 2 Way Splitter 3/8". This is a "y" splitter for multiple reservoirs for the Merlin GP RO system as well as the Tall Boy system.

Item No. 728941: 3 Way Splitter 3/8". This is a "y" splitter for multiple reservoirs for the Merlin GP RO system as well as the Tall Boy system.

Item No. 728942: 3/8" Quick Connect Inline Shut Off Valve. This is used to shut off feed or outlet line to system. This valve is for the Merlin GP RO system as well as the Tall Boy system.

Item No. 728943: 3/8" Quick Connect Union Connector. This is to connect 2 lengths of equal sized tubing together for the Merlin GP RO system as well as the Tall Boy system.

HYDRO-LOGIC™ FLOAT VALVE FOR TALL BOY

Item No.	Description	MSRP
728914	Hydro-logic™ Float Valve for Tall Boy	$19.00

This valve comes with a 3/8" quick connect fitting. Use this float valve to adjust water level and can be mounted horizontally or vertically. The kit allows you to fill a reservoir or tank, unattended, to your desired water level.

HYDRO-LOGIC™ SMALL BOY

Item No.	Description	MSRP
728875	Hydro-logic™ Small Boy	$106.95

Removes up to 99% of chlorine, 90% of sediment, rust, silt, etc. and volatile organic compounds and particulates down to 5 microns @ 1 GPM. Easily produces 60 gallons per hour of clear water and has a filter capacity of 3,000 gallons.

Includes: 2-Stage 10" Filter Unit, wall mountable metal bracket, garden hose connector, 4 ft. feed line, 6 ft. outlet line, 1/4" shut-off, filter wrench and instructions. Unit size is 11 " x 14" and weight is 6.4 lbs. Limited 1 year warranty.

HYDRO-LOGIC™ SMALL BOY REPLACEMENT FILTERS

Item No.	Description	MSRP
728805	Hydro-logic™ Stealth & Small Boy Green Carbon Filter	$16.50
728885	Hydro-logic™ Small Boy Sediment Filter-10"	$11.00
728975	Hydro-logic™ Small Boy KDF85 Carbon Filter	$39.00

KDF85 Filter is ideal for well water users with iron and sulfur and city water users with chloramines.

HYDRO-LOGIC™ TALL BOY & TALL BLUE

Item No.	Description	MSRP
728890	Hydro-logic™ Tall Boy	$183.95
728860	Hydro-logic™ Tall Blue	$163.95

The Tall Boy removes up to 99% of chlorine, 90% of sediment, rust, silt, etc. and volatile organic compounds and particulates down to 5 microns @ 2 GPM. Easily produces 120 gallons per hour of clear water and has a filter capacity of 7,500 gallons.

Includes: 2-stage 20" Filter Unit, wall mountable metal bracket, female garden hose connector, brass male garden hose connector, 4 Ft. feed line, 4 Ft. outlet line, filter wrench and instructions. Unit size is 11" x 24" and weight is 11 lbs. Limited 1 year warranty.

The Tall Blue Prefilter for Merlin GP. Removes up to 99% of chlorine, 90% of sediment, rust, silt, etc. and volatile organic compounds and particulates down to 5 microns to pre-treat water before the Merlin GP. Extends pre-filter life by 3 times.

Includes: 2-Stage 20" Pre-Filter Unit, wall mountable metal bracket, 4 ft. feed line to Merlin-Garden Pro™, filter wrench and instructions. Unit size is 11" x 24" and weight is 11 lbs. Limited 1 year warranty.

HYDRO-LOGIC™ TALL BOY & TALL BLUE REPLACEMENT FILTERS

Item No.	Description	MSRP
728865	Hydro-logic™ Tall Green Carbon Filter - 20"	$31.00
728870	Hydro-logic™ Tall Sediment Filter - 20"	$14.00
728980	Hydro-logic™ Tall Blue KDF85 - 20" Carbon Filter	$69.50

KDF85 Filter is ideal for well water users with iron and sulfur and city water users with chloramines.

HYDRO-LOGIC™ BIG BOY

Item No.	Description	MSRP
728985	Hydro-logic™ Big Boy	$439.00

Big Boy extra high capacity de-chlorinator and sediment filter. High flow rate of 7 gallons per minute or 420 gallons per hour. Whole house filter or stand alone (*with optional garden hose connection kit). It has a 25,000 gallon capacity. Removes 99% of chlorine and 95%+ of sediment. Give your plants and family pure H20 with NO offensive tastes or odors.

Includes: 2-stage oversized housings with pleated, cleanable sediment and carbon block filters, Inlet and outlet pressure gauges, Heavy duty wall mountable aluminum bracket - NO RUST, 1" inlet and outlet for whole house application, Filter wrench and instructions.

HYDRO-LOGIC™ BIG BOY REPLACEMENT FILTERS

Item No.	Description	MSRP
728950	Hydro-logic™ Big Boy Carbon Filter	$63.00
728955	Hydro-logic™ Big Boy Sediment Filter	$55.00
728960	Hydro-logic™ Big Boy KDF85 Carbon Filter (SO)	$129.00

KDF85 Filter is ideal for well water users with iron and sulfur and city water users with chloramines.

HYDRO-LOGIC™ BIG BOY ULTRA VIOLET STERILIZER

Item No.	Description	MSRP
728924	Hydro-logic™ Big Boy UV Sterilizer (SO)	$489.00

Ultra Violet Sterilizer add on for Big Boy. Kills any bacteria, viruses, living biology in source water. Great for well or surface water sources.

HYDRO-LOGIC™ BIG BOY GARDEN HOSE CONNECTION KIT

Item No.	Description	MSRP
728930	Hydro-logic™ Big Boy Garden Hose Connection Kit	$18.00

Female garden hose thread inlet and male garden hose thread outlet. To hook Big Boy up to garden hose.

HYDRO-LOGIC™ UV FILTER CONNECTION & MOUNTING KIT

Item No.	Description	MSRP
728931	Hydro-logic™ UV Filter Kit (SO)	$45.00

Female garden hose thread inlet, output of Big Boy to UV connection, mounting brackets for UV for Big Boy, and male garden hose thread outlet on UV. To hook Big Boy with top mounted UV up to garden hose.

HYDRO-LOGIC™ FLOAT VALVE BIG

Item No.	Description	MSRP
728945	Float Valve Big (SO)	$65.00

Heavy duty float valve with 3/4" male pipe thread and bulk head fitting. Adjustable water level and bulk head fitting. Up to 20 GM flow rates. Use this float for the Big Boy or garden hose.

AQUA SHUTTLE KIT

Item No.	Description	MSRP
706115	Aqua Shuttle Kit	$38.00

Used to convert an Ebb and Flow system to a drip system. Can also be used to disperse water from one source to six plant sites, a perfect application for any garden! Adjustable valves allow you to regulate water flow to each individual site. System comes complete with adjustable drippers on stakes and can be customized to accommodate another unit or various other sprayers, misters, and sprinklers.

FILL/DRAIN FITTINGS

Item No.	Description	MSRP
706750	Fitting Kit (Gray & Teal Adapter)	$9.95
706751	Teal Fill/Drain Fitting Adapter	$3.95

The Fill/Drain Fittings Includes one fill/drain fitting (custom bulkhead fitting with 1/2" screen, nut and O-ring) and one overflow fitting (PVC tube and adapter with 1" screen). These work great individually, but work together to allow you to make a tray into an ebb/flow system.

ECOPLUS® EBB & FLOW FITTINGS

Item No.	Description	Pcs/Bags	MSRP
708560	Outlet extension	10	.74¢/ea
708565	Screen	10	.64¢/ea
708570	½" Tub outlet fitting (13mm)	10	$2.40/ea
708575	¾" Tub outlet fitting (19mm)	10	$2.70/ea
708580	1" Tub outlet fitting (25mm)	10	$3.10/ea

- Manufactured using the finest quality materials.
- All pieces offered a la carte for maximum flexibility.

ECOPLUS® EBB & FLOW FITTING KIT

Item No.	Description	MSRP
708562	EcoPlus® Fitting Kit	$6.29

Kit includes: 1 - 1/2" Tub Outlet Fitting, 1 - 3/4" Tub Outlet Fitting, 2 - Screen Fittings and 3 - Outlet Extension Fittings. Manufactured using the finest quality materials and craftsmanship.

BOTANICARE® EBB & FLOW FITTINGS

Item No.	Description	Pcs/Bags	MSRP
708551	Ebb & Flow ½" Barbed Fitting	25	$1.80/ea
708552	Ebb & Flow ¾" Barbed Fitting	25	$2.00/ea
708553	Ebb & Flow Extension Fitting	25	.65¢/ea
708554	Ebb & Flow Screen Fitting	25	.65¢/ea
708555	Ebb & Flow Fitting Washer	25	.65¢/ea
708556	Ebb & Flow Fitting Kit with 2 Extensions	1	$6.30/ea

- Interior threads which accept ¾" standard pipe thread.
- Use as ebb and flow fittings and bulkhead fittings.
- Increased versatility: thread PVC pipe fittings into bulkhead fittings - ideal for use in aeroponic and drip applications.

BARBED REDUCER

Item No.	Description	MSRP
708055	3/4" to 1/2" Barbed Reducer	.85¢

Use this high quality fitting to go from a 3/4" hose or tube to a 1/2" hose.

ECOPLUS® 1/4" BARBED CONNECTORS 1/2" BARBED CONNECTORS & VALVES

Item No.	Description	Bag Qty	MSRP
708405	1/4" (4mm) Tee	10	.38¢/ea
708410	1/4" (4mm) Straight	10	.24¢/ea
708415	1/4" (4mm) Elbow	10	.36¢/ea
708420	1/2" (13mm) Tee	10	.50¢/ea
708425	1/2" (13mm) Straight	10	.46¢/ea
708430	1/2" (13mm) Elbow	10	.52¢/ea
708435	1/2" (13mm) Inline Valve	10	$3.20/ea

ECOPLUS® 3/4" BARBED CONNECTORS & VALVES & 1" BARBED CONNECTORS

Item No.	Description	Bag Qty	MSRP
708440	3/4" (19mm) Tee	10	$1.14/ea
708445	3/4" (19mm) Straight	10	.96¢/ea
708450	3/4" (19mm) Elbow	10	$1.04/ea
708455	3/4" (19mm) Inline Valve	10	$3.50/ea
708460	1" (25.4mm) Tee	10	$1.38/ea
708465	1" (25.4mm) Straight	10	$1.18/ea
708470	1" (25.4mm) Elbow	10	$1.30/ea

SPRAYERS & AEROPONIC CLONE SPINNER 360°

Item No.	Description	MSRP
706392	EZ-Clone™ 360° Sprayer	.70¢/ea
708195	180° Sprayer	.70¢/ea
708200	360° Sprayer	.70¢/ea
708190	360° Clone Spinner	$1.75

These sprayers are used in high output aeroponic gardening applications.

A rotating 360° sprayer that is ideal for rooting cuttings aeroponically. The spinner comes complete with a male thread for a secure, no leak fit. (Used in Clone Machines).

RAINDRIP® ½, 1 & 2 GPH DRIPPERS

Item No.	Description	RD #	Eaches/Card	MSRP
708625	½ GPH Drippers Blister Card	R108CT	10	.88¢/ea
708626	½ GPH Drippers Bag	PC2025B	25	.54¢/ea
708630	1 GPH Drippers Blister Card	R110CT	10	.88¢/ea
708631	1 GPH Drippers Bag	PC4025B	25	.54¢/ea
708635	2 GPH Drippers Blister Card	R112CT	10	.88¢/ea
708636	2 GPH Drippers Bag	PC8025B	25	.54¢/ea

Raindrip®'s "turbulent flow" PC (pressure compensating) drippers maintain their rated flow rate for 10-60 psi inlet pressure. These drippers can be used at the end of 1/4" tubing feeders or can be inserted directly into 1/2" Raindrip® hose.

RAINDRIP® STAKES & CLAMP

Item No.	Description	RD #	Eaches/Card	MSRP
708640	4" Support Stakes	R380CT	10	.24¢/ea
708645	6" Support Stakes	R381CT	10	.36¢/ea
708650	1/2" - 5/8" Hose End Clamps	R301CT	5	.58¢/ea

4" support stakes are plastic stakes that hold 1/4" tubing in place next to plants. 6" support stakes are heavy duty plastic stakes that hold 1/4" lines in place.

The hose end clamps close off ends of 1/2" or 5/8" poly hose.

RAINDRIP® HOLE PUNCHES & CUTTER

Item No.	Description	RD #	MSRP
708670	Hole Punch - Black	R630CT	$3.95
708675	Professional Hole Punch	63100UB	$12.49
708665	Professional Tubing Cutter	63200UB	$12.49

Both the hole punch and professional hole punch are designed for comfortable use. They punch holes in 1/2", 5/8" or .710" hose to insert PC drippers or 1/4" fittings. The black hole punch includes 10 hole plugs.

The professional tubing cutter has a hardened stainless steel blade that is designed to cut all flexible plastic hose/tubing up to 1.5" outside diameter.

RAINDRIP® WATER TIMER & 3 OUTLET MANIFOLD TRIPLE SHUT-OFF

Item No.	Description	RD #	MSRP
708680	Analog Electronic Timer	R672CT	$49.89
708695	3 Outlet Manifold Triple Shut-off	61900UB	$2.99

Raindrip's single station battery-operated analog water timer is for 3/4" faucet/hose spigot hook-up. Large control knobs for easy set-up. Features adjustable frequency and run times.

This 3 outlet manifold converts one faucet to three separately controllable outlets. 3/4" female hose thread inlet x 3/4" male hose threaded outlets.

RAINDRIP® "Y" FILTER WITH ¾" INLET & OUTLET

Item No.	Description	RD #	MSRP
708700	"Y" Filter with 100 micron screen - ¾" Inlet & Outlet	60400UB	$15.59
708705	100 micron replacement screen	603010	$4.39

Removes dirt particles from water supply and feeds plants automatically as they are watered. Recommended for well water. Includes hose/pipe swivel coupling. Replacement polyester screen element. 150 mesh (100 Micron) filter screen elements for "Y" Filters; stainless steel screen.

RAINDRIP® POLY TUBING

Item No.	Description	RD #	MSRP
708655	1/4" Poly Tubing 50' Roll	016005P	$5.99
708657	1/4" Poly Tubing 1000' Roll	016100	$86.90
708660	1/2" Poly Tubing 50' Roll	052005P	$11.89

Professional quality hose is made from linear, low-density polyethylene (poly). Composed of 2.2% carbon black and UV inhibitors, it can be left year round, buried or on the surface, in any weather. Superior to hose made from reprocessed materials.

VINYL TUBING

Item No.	Description	Roll Length	Inside Dia	Outside Dia	MSRP	Typical Uses
708215	Clear Tubing	100 ft.	3/16"	1/4"	$11.95	Airline for EcoPlus® 1, 2, 4 & 8 pumps
708220	Black Tubing	100 ft.	3/16"	1/4"	$25.00	Irrigation drip line
708222	Clear Tubing	100 ft.	1/4"	3/8"	$25.49	Airline for Commercial Air 1 pump
708223	Black Tubing	100 ft.	3/8"	1/2"	$35.95	Airline for Commercial Air 3 & 5 pumps
708225	Blue Tubing	100 ft.	1/2"	5/8"	$28.95	Irrigation line/hydroponics
708230	White Tubing	100 ft.	1/2"	5/8"	$50.00	Irrigation line/hydroponics
708235	Black Tubing	100 ft.	1/2"	5/8"	$28.95	Irrigation line/hydroponics
708245	Black Tubing	100 ft.	3/4"	1"	$135.00	Irrigation line/hydroponics
708250	White Tubing	100 ft.	3/4"	1"	$135.00	Irrigation line/hydroponics
708251	Black Tubing	50 ft.	1"	1 1/4"	$77.95	Irrigation line/hydroponics

CLIC CLAMPS FOR TUBING

Item No.	Description	MSRP
708005	1/2" Clic Clamp	.69¢
708010	3/4" Clic Clamp	.95¢
708020	1" Clic Clamp	$1.10

Ensures a secure hose connection. Easy to use.

HOSE PUNCH & FLOAT VALVE

Item No.	Description	MSRP
708180	1/8" Hose punch	$1.50
708170	Float valve	$26.16

Tough enough to punch a hole in thick, flexible tubing. Makes a 1/8" hole specifically for drip lines.

An essential part for do-it-yourselfers! This float valve assembly controls the water/nutrient solution level in your primary reservoir (controller). Comes with 1/2" brass barbed fitting.

NEW!

ECOPLUS® GROMMETS - BULK

Item No.	Description	Box Qty	MSRP
708376	3/8" Rubber Grommet	250	.48¢/ea
708378	1/2" Rubber Grommet	250	.50¢/ea
708380	3/4" Rubber Grommet	250	$1.09/ea

NEW!

ECOPLUS® GROMMETS

Item No.	Description	Pcs/Bag	MSRP
708370	3/8" Rubber Grommet	25	.56¢/ea
708372	1/2" Rubber Grommet	25	.58¢/ea
708374	3/4" Rubber Grommet	25	$1.19/ea

GROMMETS

These grommets can be used to replace old, worn grommets in your hydroponic systems and are essential components when making a system from scratch.

Item No.	Description	MSRP
708300	1/4" (6mm) Grommet	.95¢
708305	1/2" (13mm) Grommet	.70¢
708310	5/8" (16mm) Grommet	.95¢
708315	3/4" (19mm) Grommet	$1.20

GH GROMMETS

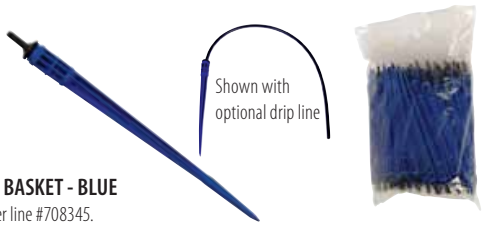
Item No.	Description	Pcs/Bag	MSRP
708320	1/2" Grommet - GH	25	.68¢/ea
708321	1/2" Grommet - GH	500	.51¢/ea
708325	1" Grommet - GH (Aeroflo Chamber Sprayline)	10	$1.90/ea
708330	1-1/4" Grommet - GH (Aeroflo Chamber Drain)	10	$2.20/ea

NEW!

DRIPPER STAKES WITH BASKET - BLACK

Made of highest quality materials. Made to be used with dripper line #708345.

Item No.	Description	Pcs/Bag	MSRP
708340	Dripper Stake with Basket - Black	25	.42¢/ea



DRIPPER STAKES WITH BASKET - BLUE

Made to be used with dripper line #708345.

Item No.	Description	MSRP
708341	Dripper Stake with Basket - Blue	.42¢/ea

DRIPPER STAKE 45°

Item No.	Description	MSRP
708350	Dripper Stake 45°	.42¢/ea

This angled dripper stake fits 1/4" irrigation tubing and has a 45° angle to reduce sharp bending of the tubing, which causes clogging. It delivers a light emission of water for regular top drip irrigation.

DRIPPER LINE FOR USE WITH DRIPPER STAKES

Item No.	Description	Pcs/Bag	MSRP
708345	Dripper Line ¼" x 15"	25	.37¢/ea

DRIPPER STAKE WITH 1/8" DRIPPER LINE

Item No.	Description	MSRP
708280	Dripper Stake with 1/8" dripper line	.75¢/ea

CLABER SPIRAL HOSE KIT

NEW!

Thanks to the Thermoplastic Polyurethane compound, the hose has excellent flexibility properties and good abrasion and kink resistance. The hose will handle an environmental temperature as low as -4° up to 158° and water pressure up to 116 psi. Packaged in a practical, transparent carrying case that is a welcoming solution for self service sales. The Kit includes:

- 33 ft. of coil hose.
- Spray pistol with waterstop connector.
- Interchangeable aerator spray head.
- Wall mount.
- Hose-end connectors.
- Standard and utility faucet connector.

Item No.	Description	MSRP
708750	Spiral Hose Kit	$60.95

CLABER MULTI-JET PISTOL

Multifunction spray nozzle with new anatomical rubber grip and convenient front on-off flow button. Rear knob adjusts strength of water jet and rubber lined lock nut protects against impact and opens easily for inspection and cleaning of pistol. Rotate the outer ring on pistol head for 4 different flow types: shower, concentrated, fan spray and mist. Performs with outdoor temperatures of up to 140° and water temperature ranging from 32° to 120°.

Item No.	Description	MSRP
708735	Multi-Jet Pistol	$23.18

CLABER FAUCET TO HOSE CONNECTOR

NEW!

Converts a faucet and hose-end to a convenient "Quick-Click" snap fit system. ABS plastic construction is UV stabilized and weatherproof. Performs with outdoor temperatures of up to 140° and water temperature ranging from 32° to 120°.

Item No.	Description	MSRP
708765	Faucet to Hose Connector	$3.95

CLABER MALE THREADED HOSE CONNECTOR

NEW!

Converts garden hoses to a convenient "Quick-Click" snap fit system. ABS plastic construction is UV stabilized and weatherproof. Performs with outdoor temperatures of up to 140° and water temperature ranging from 32° to 120°.

Item No.	Description	MSRP
708770	Male Threaded Hose Connector	$2.60

CLABER THREADED FAUCET CONNECTOR

NEW!

Easily attaches to any outdoor faucet to allow use with convenient "Quick-Click" snap fit connectors. ABS plastic construction is UV stabilized and weatherproof. Performs with outdoor temperatures of up to 140° and water temperature ranging from 32° to 120°.

Item No.	Description	MSRP
708755	Threaded Faucet Connector	$1.80

CLABER WATERSTOP HOSE END CONNECTOR

NEW!

Converts twist-on threaded connections to a convenient "Quick-Click" snap fit system. Water flow automatically shuts off when sprinkler or nozzle is removed. ABS plastic construction is UV stabilized and weatherproof. Performs with outdoor temperatures of up to 140° and water temperature ranging from 32° to 120°.

Item No.	Description	MSRP
708760	Waterstop Hose End Connector	$3.20

CLABER KOALA INDOOR FAUCET CONNECTOR

Item No.	Description	MSRP
708745	Koala Indoor Faucet Connector	$8.87

Converts a household faucet to enable use of any standard garden hose. Easily attaches to most long neck kitchen and/or utility faucets. Easy to install, no tools required. Ideal to fill aquariums, waterbeds or to water patio plants. Performs with outdoor temperatures of up to 140° and water temperature ranging from 32° to 120°.

CLABER DOUBLE FAUCET CONNECTOR

NEW!

Simply converts an outdoor faucet into 2 independent outlets, each with separate and easy to turn shut-off control knob. ABS plastic construction is UV stabilized and weatherproof.

Ideal to coordinate all of your watering applications that includes drip systems and multiple hose attachments. Also enables use for two water timers. Performs with outdoor temperatures of up to 140° and water temperature ranging from 32° to 120°.

Item No.	Description	MSRP
708780	Double Faucet Connector	$10.60

CLABER 4 WAY WATER DISTRIBUTOR

NEW!

Simply converts an outdoor faucet into 4 independent outlets, each with separate and easy to turn shut-off control knob. ABS plastic construction is UV stabilized and weatherproof.

Ideal to coordinate all of your watering applications that includes drip systems and multiple hose attachments. Performs with outdoor temperatures of up to 140° and water temperature ranging from 32° to 120°.

Item No.	Description	MSRP
708730	4 Way Water Distributor	$33.50

CLABER AQUANO VIDEO 2 TIMER

NEW!

With only 3 programming buttons and easy to read digital screen, this single line timer allows 2 customized watering cycles per day from as little as 1 minute up to 23 hours; 7 days in advance. Weekly and/or manual programs may also be stored into the timer. Patented circuitry is completely sealed and watertight to prevent damage to electronic parts. Built-in stainless steel filter traps harmful contaminants that could clog or damage valves. Operates on one 9v battery (not included).

Item No.	Description	MSRP
708785	Aquano Video 2 Timer	$69.95

CLABER AQUADUE DUPLO WATER TIMER

NEW!

This unique dual line timer allows for 2 operational lines with complete independent programming from one hose bib with up to 3 starts per day, per line. With only 3 programming buttons and easy to read digital screen, one or both lines can be programmed for customized watering cycles from as little as 1 minute up to 23 hours; 7 days in advance. Weekly and/or manual programs may also be stored into the timer. Patented circuitry is completely sealed and watertight to prevent damage to electronic parts. Built-in stainless steel filter traps harmful contaminants that could clog or damage valves. Operates on one 9v battery (not included).

Item No.	Description	MSRP
708740	Aquadue Duplo Water Timer	$132.50

TITAN CONTROLS® - WWW.TITANCONTROLS.NET

- We offer the industry's widest & best selection of environmental control products.
- Built with the finest quality components.
- Digitally controlled devices.
- Easy to operate.
- First rate technical support at 1-888-80-Titan or 1-888-808-4826.
- Reduction of Hazardous Substances (RoHS) compliant.
- Heavy-duty construction.
- Instructions in both English & Spanish.
- Easy to understand diagrams on most boxes illustrating typical applications.

TITAN CONTROLS® CO2 REGULATOR

Item No.	Description	MSRP
702710	Titan Controls® CO2 Regulator	$149.95
702712	Replacement White Plastic Washer	.99¢

- Compatible with Titan Controls CO2 Controller or other 120 volt controllers and timers.
- Precision Accuracy Flow Meter - .5 to 15 SCF/hour.
- Features heavy-duty solenoid valve.
- Brass construction for long-lasting dependability and durability.
- Includes 12' of CO2 dispensing line.
- Powered by 6' - 120 volt grounded power cord.
- High quality oil-less pressure gauge.
- 1 Amp/120 Volts/60 Hz.
- 3 Year Warranty.

TITAN CONTROLS® CO2 INLINE HEATER

Item No.	Description	MSRP
702715	Titan Controls® CO2 Inline Heater - 120 Volt	$169.95
702712	Replacement White Plastic Washer	.99¢

The Titan Controls® CO2 heater was designed to prevent CO2 regulator freeze-up and avoid cracking the internal diaphragm of the regulator due to high flow conditions. The CO2 Heater is installed between the CO2 cylinder valve and the regulator, and warms the gas stream allowing for increased flow rates without regulator freeze-up. The CO2 Heater may be used in conjunction with a Titan Controls CO2 Greenhouse Regulator or any other CO2 regulator system:

- Aluminum case and solid brass expansion chamber.
- Completely enclosed heating element.
- Solid brass fittings for CO2 cylinders, CGA 320.
- Capacity = 90 scfh maximum.
- 1 Amp/120 Volts/60 Hz.
- 1 year warranty.

TITAN CONTROLS® ATLAS 1™ - CO2 MONITOR/CONTROLLER

Item No.	Description	MSRP
702615	Titan Controls® Atlas 1™ - CO2 Monitor/Controller	$599.95

- Digital control board delivers precision CO2 control.
- Maximize your CO2 production while minimizing CO2 or LP consumption.
- Adjust CO2 set point, modify elevation or calibrate with just two buttons.
- Controls any CO2 equipment that is operated by 120 volt power.
- Durable powder coated, steel enclosure will stand up to the toughest conditions.
- Adds CO2 only during daylight period using the controllers integrated photocell.
- 50 parts per million (ppm) deadband/hysteresis built into set point.
- Memory retains controllers setting even when the power is off.
- 15 Amps/120 Volt/60 Hz.
- 3 year warranty.

The use of Carbon Dioxide (CO2) has been scientifically proven to increase the productivity of plants. By elevating CO2 to the proper levels (1000 ppm to 2000 ppm), you can accelerate your plant growth from 35% to 50% and increase your yield. The Selene series CO2 generators have been built to meet the highest quality and safety standards in the market today. The ease of use and dependability are what makes Titan Controls a leader in hydroponic technology! Products created for our industry, by our industry.

TITAN CONTROLS® SELENE 1™

Item No.	Description	MSRP
902516	Titan Controls® Selene 1™ - CO2 Generator LP Gas - 4 Burner	$457.95

The Selene 1 is for use in small to medium sized (under 300 sq ft) grow spaces. The unit comes with 4 burners installed and includes brass plugs to decrease CO2 production, if required. The Selene 1 comes with: 12 foot LP rated hose with POL fitting, 120 Volt A/C power adapter, #4 ceiling hook, steel chain to hang the Selene, hex wrench and a spare burner plug. All you need is a LP tank and you're good to go!

- Four (4) burners – Adjustable from 5,588 BTU's to 11,176 BTU's.
- Electronic Spark Ignition (ESI) – No pilot light necessary.
- Safe, reliable and easy to operate.
- Saves money vs. bottled CO2.
- Safety "tip-over" switch shuts down LP gas to Selene 1 in case the CO2 generator falls or gets knocked over .
- Natural Gas (NG) conversion kits available from your Authorized dealer.
- Only the highest quality components are used.
- 2 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® SELENE 2™

Item No.	Description	MSRP
902514	Titan Controls® Selene 2™ - CO2 Generator LP Gas - 8 Burner	$629.95

The Selene 2 is for use in larger (over 300 sq. ft.) grow spaces. The unit comes with 8 burners installed and includes brass plugs to decrease CO2 production, if required. The Selene 2 comes with: 12 foot LP rated hose with POL fitting, 120 Volt A/C power adapter, #4 ceiling hook, steel chain to hang the Selene, hex wrench and a spare burner plug. All you need is a LP tank and you're good to go!

- Eight (8) burners – Adjustable from 11,176 BTU's to 22,352 BTU's.
- Electronic Spark Ignition (ESI) – No pilot light necessary.
- Safe, reliable and easy to operate.
- Saves money vs. bottled CO2.
- Safety "tip-over" switch shuts down LP gas to Selene 2 in case the CO2 generator falls or gets knocked over.
- Natural Gas (NG) conversion kits available from your Authorized dealer.
- Only the highest quality components are used.
- 2 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® SELENE BURNERS

NEW!

Each kit contains 4 high quality brass burners, hex wrench to remove any filler plugs and a small sachet of pipe dope to properly seal burners in generator.

Item No.	Description	MSRP
702720	Selene LP 4 Burner Kit – 0-3,500 ft	$49.95
702722	Selene LP 4 Burner Kit – 3,500-6,000 ft	$49.95
702724	Selene LP 4 Burner Kit – 6,000-10,000 ft	$49.95
702726	Selene NG 4 Burner Kit – 0-3,500 ft	$49.95
702728	Selene NG 4 Burner Kit – 3,500-6,000 ft	$49.95
702730	Selene NG 4 Burner Kit – 6,000-10,000 ft	$49.95

TITAN CONTROLS® SELENE ACCESSORIES

Item No.	Description	MSRP
702732	Selene Burner Plug Kit - 4 Plugs	$9.95
702734	Selene LP Hose & Regulator Kit - 15 ft	$49.95
702736	Selene Power Adapter - 120V/1 Amp	$14.95
702738	Selene Hanging Chain Kit - 48"	$13.95

TITAN CONTROLS® NYX 1™ - DAY/NIGHT PHOTOCONTROLLER

Item No.	Description	MSRP
702625	Titan Controls® Nyx 1™	$114.95

- Activate your lamp cooling fan, light mover or night exhaust fan with this straightforward, easy to use controller.
- Goes from 'DAY' to 'NIGHT' mode with a flip of the switch.
- Built using durable powder coated steel enclosure with the highest quality components available.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® HADES 1™ - 15 MINUTE DELAY TIMER

Item No.	Description	MSRP
702690	Titan Controls® Hades 1™	$79.95

This product provides protection for your lights should your power go out. It's a low cost security system for your lamps that give you the peace of mind you're looking for with your lighting system.

The Hades 1 is easy to use. Just plug the 120 Volt relay trigger cord into the controller and you're protected. This timer makes lighting control safe and simple!

- Protects your lights from "Hot Starts" due to power failure.
- Pre-set 15 minute delay.
- No adjustments required.
- Chassis protects controller from moisture and dust.
- Only the highest quality components are used.
- Controllers designed by our industry, for our industry.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® APOLLO 1™ - REPEAT CYCLE TIMER WITH PHOTOCELL

Item No.	Description	MSRP
702600	Titan Controls® Apollo 1™ - Repeat Cycle Timer w/Photocell	$189.95

- Digital control board allows for precise timer settings.
- 3 seconds to 30 minutes "on-time" and 3 minutes to 8 hours "off-time".
- Very easy to set and use.
- Will run CO2 with switch set to 'day' position.
- Use to run a pump with the switch in the 'both' position.
- Will run an exhaust fan with switch set to 'night' position.
- Durable powder coated, steel enclosure will stand up to the toughest conditions.
- The green LED light on the front of the controller shows the user when the timer is 'on'.
- 15 Amps/120 Volts/60 Hz./1/2 HP.
- 3 year warranty.

TITAN CONTROLS® APOLLO 2™

NEW!

- 10 seconds to 20 minutes 'ON TIME'.
- 1 minute to 12 hours 'OFF TIME'.
- Controls timed equipment during daytime only, nighttime only or both.
- Plastic enclosure protects internal components from dust and moisture.
- Use to time fans, pumps or CO2.
- 15 Amps/120 Volts/60 Hz./1/3 HP.
- 3 year warranty.

Item No.	Description	MSRP
702740	Titan Controls® Apollo 2™ Cycle Timer with Photocell	$89.95

TITAN CONTROLS® APOLLO 3™ - FIXED CYCLE TIMER

- 1 minute 'on-time' & 4 minute 'off-time'.
- Timing is preset – requires no user adjustments.
- Ideal for aeroponic, ebb & flow or misting applications.
- Excellent for NFT – Nutrient Film Technique systems.
- Plastic enclosure protects internal components from dust and moisture.
- 10 Amps/120 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
702635	Titan Controls® Apollo 3™ - Fixed Cycle Timer	$72.95

TITAN CONTROLS® APOLLO 4™ - 120 VOLT IN-LINE TIMER

Item No.	Description	MSRP
734135	Titan Controls® Apollo 4™ - 120 Volt In-line Timer	$53.95

This product provides 24 hour lighting control for up to a 1000 watt ballast from a 120 Volt outlet.

The Apollo 4 is compatible with all 120 volt ballasts that feature a Smart Volt power cord. This includes: Sun System 1, 6 & 10, Harvest Pro, Harvest Pro Elite, Budget Gro, Galaxy and Lumatek ballasts. This timer makes lighting control simple!

- 24 hour lighting control.
- Non-detachable captive trippers are easy to set.
- Plastic cover keeps dust and moisture out of timer.
- Easy to understand & simple to use.
- Only the highest quality components are used.
- Controllers designed by our industry, for our industry.
- 13 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® APOLLO 5™ - 240 VOLT IN-LINE TIMER

Item No.	Description	MSRP
734140	Titan Controls® Apollo 5™ - 240 Volt In-line Timer	$57.95

This product provides 24 hour lighting control for up to a 1000 watt ballast from a 240 Volt outlet.

The Apollo 5 is compatible with all 240 Volt ballasts that feature a Smart Volt power cord. This includes: Sun System 1, 6 & 10, Harvest Pro, Harvest Pro Elite, Budget Gro, Galaxy and Lumatek ballasts. This timer makes lighting control simple!

- 24 hour lighting control.
- Non-detachable captive trippers are easy to set.
- Plastic cover keeps dust and moisture out of timer.
- Easy to understand & simple to use.
- Only the highest quality components are used.
- Controllers designed by our industry, for our industry.
- 13 Amps/240 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® APOLLO 6™

Item No.	Description	MSRP
734110	Titan Apollo 6™ 24 Hr. Analog Timer with 15 Minute Intervals	$13.95

NEW!

The Apollo 6 - 24 hour programmable timer is the perfect timing solution for your hydro systems. With a 15 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 6 has 96 non-detachable 15 minute trippers and can be configured in numerous timing schedules to meet the most demanding timing requirements.

- One (1) outlet.
- 15 minute intervals.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Runs lights, pumps, fans, etc.
- 15 Amps/120 Volts/60 Hz./1800 Watts.
- 1 year warranty.

TITAN CONTROLS® APOLLO 7™

Item No.	Description	MSRP
734112	Titan Apollo 7™ 24 Hr. Digital Timer	$18.95

NEW!

The Apollo 7 - 24 hour digital timer is the perfect timing solution for your hydro systems. With a 15 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 7 may be set to 1 minute intervals and run 8 separate schedules per day. The Apollo 7 can be configured in numerous timing schedules to meet the most demanding timing requirements.

- One (1) outlet.
- 1 minute intervals.
- Battery back-up feature saves settings in case of power failure.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Only the highest quality components are used.
- Runs lights, pumps, fans, etc.
- 15 Amps/120 Volts/60 Hz./1800 Watts.
- 1 year warranty.

Helpful hint: If not functioning properly, plug in for 5 minutes and press the reset button. This generally fixes any problem.

TITAN CONTROLS® APOLLO 8™

Item No.	Description	MSRP
734100	Titan Apollo 8™ Two Outlet 24 Hr. Analog Timer	$17.95

The Apollo 8 - 24 hour programmable timer is the perfect timing solution for your hydro systems. With two outlets and a 15 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 8 has 96 non-detachable 15 minute trippers and can be configured in numerous timing schedules to meet the most demanding timing requirements.

- Two (2) outlets.
- 15 minute intervals.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Runs lights, pumps, fans, etc.
- 15 Amps/120 Volts/60 Hz./1800 Watts.
- 1 year warranty.

TITAN CONTROLS® APOLLO 9™

Item No.	Description	MSRP
734105	Titan Apollo 9™ Two Outlet Digital Timer	$22.95

- The Apollo 9 - 24 hour digital timer is the perfect timing solution for your hydro systems. With two outlets and a 15 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 9 may be set to 1 minute intervals and run 8 separate schedules per day. The Apollo 9 can be configured in numerous timing schedules to meet the most demanding timing requirements.
- Two (2) outlets.
- 1 minute intervals.
- Battery back-up feature saves settings in case of power failure.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Only the highest quality components are used.
- Runs lights, pumps, fans, etc.
- 15 Amps/120 Volts/60 Hz/1800 Watts.
- 1 year warranty.

Helpful hint: If not functioning properly, plug in for 5 minutes and press the reset button. This generally fixes any problem.

TITAN CONTROLS® APOLLO 10™

Item No.	Description	MSRP
734145	Titan Apollo 10™ 240 Volt 24 Hr Analog Timer	$18.95

NEW!

The Apollo 10 - 240Volt/24 hour programmable timer is the perfect timing solution for your hydroponic systems. With a 10 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 10 has 96 non-detachable 15 minute trippers and can be configured in numerous timing schedules for any timing configuration that the grower may require. Flexible, dependable and easy to use!

- One (1) outlet.
- 15 minute intervals.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Only the highest quality components are used.
- Runs lights, pumps, fans, etc.
- 10 Amps/240 Volts/60 Hz/2400 Watts.
- 1 year warranty.

TITAN CONTROLS® CETO 1™ - CONTROLLER

Item No.	Description	MSRP
702685	Titan Controls® Ceto 1™ - Controller	$290.95

- Specifically designed to turn off a pump or light should reservoir leak.
- Use with Fresca Sol lighting systems.
- Easy to use.
- Provides system security.
- Waterproof NEMA chassis.
- Manual reset if system activates to avoid flooding.
- 20 Amps/120 Volts/60 Hz.
- 3 year warranty.

Coming Soon

TITAN CONTROLS® APOLLO 12™

Item No.	Description	MSRP
702745	Titan Controls® Apollo 12™ Cycle Timer - Short Cycle Timer w/ Photocell	$89.95

NEW!

- 5 seconds to 30 minutes 'ON TIME' .
- 5 seconds to 60 minutes 'OFF TIME'.
- Precise short cycle timing of fans, pumps or CO2.
- Controls timed equipment during daytime only, nighttime only or both.
- Plastic enclosure protects internal components from dust and moisture.
- 15 Amps/120 Volts/60 Hz./1/3 HP.
- 3 year warranty.

TITAN CONTROLS® HELIOS 1™ - 4 LIGHT 120V CONTROLLER WITH TIMER

Item No.	Description	MSRP
702660	Titan Controls® Helios 1™	$202.95

Easy access panel for quick installation

- This controller will run four (4) HID lights at 120 Volts – Maximum 4000 Watts.
- Features premium quality Seimens brand relay.
- 120 Volt accessory timed outlet to activate in-line fans to cool your lamps.
- German built 24 hour timer with 15 minute non-detachable setting tabs.
- 3 screws in back panel makes timer easy to wire into your power system.
- On/Off switch that makes lamp replacement easy.
- Four NEMA 5-20 outlets.
- Durable powder coated steel chassis.
- 50 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® HELIOS 2™ - 4 LIGHT 120V CONTROLLER WITH RELAY TRIGGER CORD

Item No.	Description	MSRP
702665	Titan Controls® Helios 2™	$174.95

Easy access panel for quick installation

- This controller will run four (4) HID lights at 120 Volts – Maximum 4000 Watts.
- Features premium quality Seimens brand relay.
- 120 Volt accessory timed outlet to activate in-line fans to cool your lamps.
- Plug relay trigger cord set into 24 hour wall timer.
- On/Off switch that makes lamp replacement easy.
- 3 screws in back panel makes timer easy to wire into your power system.
- Four NEMA 5-20 outlets.
- Durable powder coated steel chassis.
- 50 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® HELIOS 3™ - 4 LIGHT 240V CONTROLLER WITH TIMER

Item No.	Description	MSRP
702670	Titan Controls® Helios 3™	$202.95

Easy access panel for quick installation

- This controller will run four (4) HID lights at 240 Volts – Maximum 4000 Watts.
- Features premium quality Seimens brand relay.
- 120 Volt accessory timed outlet to activate in-line fans to cool your lamps.
- German built 24 hour timer with 15 minute non-detachable setting tabs.
- 3 screws in back panel makes timer easy to wire into your power system.
- On/Off switch that makes lamp replacement easy.
- Universal outlets allow total flexibility.
- Durable powder coated steel chassis.
- 30 Amps/240 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® HELIOS 4™ - 4 LIGHT 240V CONTROLLER WITH RELAY TRIGGER CORD

Item No.	Description	MSRP
702675	Titan Controls® Helios 4™	$174.95

Easy access panel for quick installation

- This controller will run four (4) HID lights at 240 Volts – Maximum 4000 Watts.
- Features premium quality Seimens brand relay.
- 120 Volt accessory timed outlet to activate in-line fans to cool your lamps.
- Plug relay trigger cord set into 24 hour wall timer.
- On/Off switch that makes lamp replacement easy.
- 3 screws in back panel makes timer easy to wire into your power system.
- Universal outlets allow total flexibility.
- Durable powder coated steel chassis.
- 30 Amps/240 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® HELIOS 7™ - 8 LIGHT 240V CONTROLLER WITH TIMER

Item No.	Description	MSRP
702676	Titan Controls® Helios 7™	$289.95

NEW!

Easy access panel for quick installation

- This controller will run eight (8) HID lights at 240 Volts.
- Features premium quality Seimens brand relays.
- Step by step instructions easy to follow & make installation easy.
- German built 24 hour timer with 15 minute non-detachable setting tabs.
- 3 screws in back panel make controller easy to wire into your power system.
- Multi-tap universal outlets will take a 120 Volt or 240 Volt ballast cord set.
- Durable 20 gauge powder coated steel chassis.
- Controllers created by our industry, for our industry!
- 50 Amps/240 Volts/60 Hz/8000 Watts.
- 3 year warranty.

April 2010

TITAN CONTROLS® HELIOS 8™ - 8 LIGHT 240V CONTROLLER WITH DUAL TRIGGER CORDS

Item No.	Description	MSRP
702677	Titan Controls® Helios 8™	$267.95

- This controller will run eight (8) HID lights at 240 Volts.
- Features premium quality Seimens brand relays.
- Step by step instructions are easy to follow & make installation easy.
- Dual trigger cord sets allow the operator to run two separate light timing schedules.
- 3 screws in back panel make controller easy to wire into your power system.
- Multi-tap universal outlets will take a 120 Volt or 240 Volt ballast cord set.
- Durable 20 gauge powder coated steel chassis.
- Controllers created by our industry, for our industry!
- 50 Amps/240 Volts/60 Hz/8000 Watts.
- 3 year warranty.

NEW!

Easy access panel for quick installation

April 2010

POWER CORDS - 30 & 50 AMP

Item No.	Description	Length	Gauge	MSRP
240370	30 amp power cord with plug	6′	10	$15.59
903198	50 amp power cord with plug	6′	6/2-8/1	$19.95
903197	50 amp power cord with ring terminals	10′	8	$39.95
903199	50 amp power cord with ring terminals	25′	8	$69.95

TITAN CONTROLS® EOS 1™ - HUMIDIFY/DEHUMIDIFY CONTROLLER

Item No.	Description	MSRP
702605	Titan Controls® Eos 1™ - Humidify/Dehumidify Controller	$126.95

- Allows precise humidity control.
- 0% - 90% range lets the user adjust humidity level to ideal settings.
- Change from 'humidification' to 'dehumidification' with just a flip of the switch.
- Controls any 120 volt humidifier, dehumidifier or fan.
- Durable powder coated, steel enclosure will stand up to the toughest conditions.
- Grounded piggy-back cord is safe and easy to use.
- Ventilation louvers help avoid water accumulation and possible damage to the unit.
- Built in 4% split differential.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® ZEPHYR 1™

NEW!

- Temperature control range is 55° F to 95° F.
- Controls cooling or heating equipment.
- Day and night settings keep temperature within 4° F of set point.
- 6 foot temperature probe is accurate to within 2° F.
- Plastic enclosure protects internal components from dust and moisture.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
702630	Titan Controls® Zephyr 1™ - Day/Night Temperature Controller	$89.95

TITAN CONTROLS® ZEPHYR 2™

NEW!

- Controller turns off your lights if temperature exceeds set point.
- Built in 0 – 30 minute 'hot start' delay with 'HOLD' feature.
- 6 foot temperature probe is accurate to within 2° F.
- Protects your garden & keeps your plants safe.
- Plastic enclosure protects internal components from dust and moisture.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
702750	Titan Controls® Zephyr 2™ - High Temperature Shut-Off with Delay	$89.95

TITAN CONTROLS® MERCURY 1™

Item No.	Description	MSRP
702695	Titan Controls® Mercury 1™ Adjustable Fan Speed Controller	$23.95

The Mercury 1 is fully adjustable for precise control of your fan, pump or small motor. This lets you 'tune' your room for the perfect environment. The Mercury 1's durable and space saving design allows it to be used in tight spaces. The on board LED indicates that the controller is functioning properly.

- Adjustable from 15% to 100%.
- Circuit breaker protected for your safety.
- Easy to use and simple to install.
- Plastic enclosure resists dust and moisture.
- Only the highest quality components are used.
- Runs fans, pumps and small motors.
- 10 Amps/120 Volts/60 Hz.
- 3 year warranty.

NEW!

TITAN CONTROLS® MERCURY 3™

NEW!

- Automatically increases or decreases fan speed based on controller set points.
- Allows user to adjust deadband range to meet garden requirements.
- Temperature control range is 55° F to 95° F.
- 6 foot temperature probe is accurate to within 2 °F.
- Plastic enclosure protects internal components from dust and moisture.
- 6 Amps/120 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
702755	Titan Controls® Mercury 3™ - Day/Night Fan Speed Controller	$119.95

TITAN CONTROLS® MERCURY 4™

NEW!

- Allows user to select minimum fan idle speed between 25% & 60% of fan rating.
- Enables the user to activate/deactivate 'low temperature' safety feature.
- Temperature control range is 55° F to 95° F.
- 6 foot temperature probe is accurate to within 2° F.
- Plastic enclosure protects internal components from dust and moisture.
- 6 Amps/120 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
702760	Titan Controls® Mercury 4™ - Multi-Function Fan Speed Controller	$119.95

Kronus Series: This series of Titan Controls provides the ultimate level of garden control. Simple and easy to use, makes these the perfect controllers for the entry level to the experienced gardener. Made with durable powder coated steel chassis with only the highest quality components. Controls created for our industry, by our industry.

TITAN CONTROLS® KRONUS 1™

Item No.	Description	MSRP
702640	Titan Controls® Kronus 1™ Digital Remote Temperature & Humidity Controller	$299.95

This product controls temperature and humidity in your grow area at your preferred settings.

The Kronus 1 activates an exhaust fan, A/C or dehumidifier if the temperature or humidity exceeds the preferred setting. Plug your exhaust fan or A/C into the 'Exhaust Fan Output' to control your temperature, and plug your dehumidifier into the 'Dehumidify Output' to keep your humidity in check. This is a favorite controller for every gardener!

- Controls temperature and humidity in your garden.
- Easy to understand.
- Highlighted 'Grow Zones' for ease of use.
- 25 foot modular remote temperature and humidity sensor.
- Only the highest quality components are used.
- Improves your yield by creating the perfect environment for your plants.
- Controllers designed by our industry, for our industry.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® KRONUS 2™

Item No.	Description	MSRP
702645	Titan Controls® Kronus 2™ Digital Remote Temperature, Humidity & CO2 Controller	$349.95

- Controls temperature, humidity and CO2 in your garden.
- Activates "CO2 ON' outlet only during daylight hours.
- Ten (10) minute 'CO2 delay' feature allows maximum CO2 coverage with minimum CO2 waste.
- Easy to understand.
- Highlighted 'Grow Zones' for ease of use.
- Only the highest quality components are used.
- 25 foot modular remote temperature and humidity sensor.
- Improves your yield by creating the perfect environment for your plants.
- Controllers designed by our industry, for our industry.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

This product controls temperature, humidity and CO2 in your grow area at your preferred settings. The built in ten (10) minute 'CO2 delay' feature deactivates the CO2 equipment if settings are exceeded by using a digitally based control system. The software polls the temperature and humidity setting ten minutes after the CO2 outlet is defeated to verify that the temperature and humidity are too high, and then activates your exhaust fan, A/C or dehumidifier to lower the conditions under the settings. If the temperature or humidity drops below the set point during the 10 minute 'CO2 delay', then the exhaust/dehumidification process is defeated and the 'CO2 ON' outlet is reactivated, saving your valuable CO2 and keeping it amongst the plants where it belongs.

The Kronus 2 activates an exhaust fan, A/C or dehumidifier if the temperature or humidity exceeds the preferred settings. The 'CO2 ON' feature is only activated during daylight periods to dose CO2 when your plants are able to uptake it and is disabled during the nighttime hours or when the humidity or temperature exceeds the preferred settings. Plug your exhaust fan, dehumidifier or A/C into the 'Exhaust Fan Output' and plug your CO2 tank with emitter system or CO2 generator into the 'CO2 Output' and you're all set!

TITAN CONTROLS® KRONUS 3™

Item No.	Description	MSRP
702650	Titan Controls® Kronus 3™ Digital Remote Day/Night Temperature & CO2 Controller	$374.95

- Controls day and night temperature and CO2 in your garden.
- Activates "CO2 ON' outlet only during daylight hours.
- Ten (10) minute 'CO2 delay' feature allows maximum CO2 coverage with minimum CO2 waste.
- Features a 'Night Only' and 'Night Heat' outputs to assist the gardener with the maintenance of the garden after the lights have turned off.
- Easy to understand.
- Highlighted 'Grow Zones' for ease of use.
- 25 foot modular remote temperature sensor.
- Only the highest quality components are used.
- Improves your yield by creating the perfect environment for your plants.
- Controllers designed by our industry, for our industry.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

This product controls temperature and CO2 in your grow area at your preferred day and nighttime settings. The built in ten (10) minute 'CO2 delay' feature deactivates the CO2 equipment if the daytime temperature setting is exceeded by using a digitally based control system. The software polls the temperature setting ten (10)minutes after the CO2 outlet is defeated to verify that the temperature is too high, and then activates your exhaust fan or A/C to lower the conditions under the setting. If the temperature drops below the set point during the ten (10) minute 'CO2 delay', then the exhaust process is defeated and the 'CO2 ON' outlet is reactivated, saving your valuable CO2 and keeping it amongst the plants where it belongs.

The Kronus 3 activates an exhaust fan or A/C if the temperature exceeds the preferred settings. The 'CO2 ON' feature is only activated during daylight periods to dose CO2 when your plants are able to uptake it and is disabled during the nighttime hours or when the temperature exceeds the preferred settings. Plug your exhaust fan or A/C into the 'Exhaust Fan Output' and plug your CO2 tank with emitter system or CO2 generator into the 'CO2 Output' and your daytime conditions are under control. For nighttime conditions, you can plug a nightlight into the 'Night Only Output' so you can work in your garden after hours or plug a timed exhaust fan into the 'Night Only Output' to ventilate your garden during the nighttime hours. The 'Night Heat Output' is used to plug a heater into to keep your plants from getting the night chills. The Kronus 3 is the ultimate in temperature controls!

TITAN CONTROLS® KRONUS 4™

Item No.	Description	MSRP
702655	Titan Controls® Kronus 4™ Digital Remote Temperature, Humidity & CO2 Controller	$399.95

- Controls CO2, DAY/NIGHT temperature and humidity in your garden.
- Activates "CO2 ON' outlet only during daylight hours.
- Ten (10) minute 'CO2 delay' feature allows maximum CO2 coverage with minimum CO2 waste.
- Features a 'Night Only' and 'Night Heat' outputs to assist the gardener with the maintenance of the garden after the lights have turned off.
- Easy to understand.
- Highlighted 'Grow Zones' for ease of use.
- 25 foot modular remote temperature and humidity sensor.
- Only the highest quality components are used.
- Improves your yield by creating the perfect environment for your plants.
- Controllers designed by our industry, for our industry.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

This product controls temperature, humidity and CO2 in your grow area at your preferred daytime and nighttime settings. The built in ten (10) minute 'CO2 delay' feature deactivates CO2 equipment if day temperature or humidity setting is exceeded by using a digitally based control system. The software polls the temperature and humidity setting ten (10) minutes after the CO2 outlet is defeated to verify that the temperature or humidity is too high, and then activates your exhaust fan or A/C to lower the conditions under your settings. If the temperature drops below the set point during the ten (10) minute 'CO2 delay', then the exhaust or A/C process is defeated and the 'CO2 ON' outlet is reactivated saving your valuable CO2 and keeping it amongst the plants where it belongs. The 'Night Only' and 'Night Heat' outputs provide a nightlight or exhaust fan and heat for your enclosure during the nighttime period. This provides the customer with 24 hour temperature and humidity control in their garden.

The Kronus 4 activates an exhaust fan or A/C or if the temperature or humidity exceeds the preferred settings. The 'CO2 ON' feature is only activated during daylight periods to dose CO2 when your plants are able to uptake it and is disabled during the nighttime hours or when the humidity or temperature exceeds the preferred settings. Plug your exhaust fan or A/C into the 'Exhaust Fan Output' and plug your CO2 tank with emitter system or CO2 generator into the 'CO2 Output' and your daytime conditions are under control. For nighttime conditions, you can plug a nightlight into the 'Night Only Output' so you can work in your garden after hours. The 'Night Heat Output' is used to plug a heater into to keep your plants from getting the night chills. The Kronus 4 gives the expert gardener the top shelf controller they're looking for to maintain their garden!

TITAN CONTROLS® PATCH CORDS

Item No.	Description	MSRP
351620	10 Foot Patch Cord	$5.39
351625	25 Foot Patch Cord	$9.59
351630	50 Foot Patch Cord	$18.95

For use with Titan Controls Kronus models. Optional 10, 25 and 50 foot cables are available.

- Cat 5e cables.
- RJ-45 plugs.
- UL Listed.
- Booted connection to avoid corrosion.

TITAN CONTROLS® TEMPERATURE SENSOR

Item No.	Description	MSRP
310640	Temperature Sensor with Photocell	$64.95

- Remote sensor is specifically designed for the **Kronus 3** controller.
- Provides a digitally based signal that reacts quickly to changing temperature levels in your garden.
- Plastic enclosure resists dust and moisture.
- Integrated photocell allows the operator to monitor both day and night conditions.
- Green LED indicates that sensor is functioning properly.
- May be located up to 50 feet from the controller.

TITAN CONTROLS® TEMPERATURE & HUMIDITY SENSOR

Item No.	Description	MSRP
310645	Temperature & Humidity Sensor with Photocell	$99.95

- Remote sensor is specifically designed for the **Kronus 1, 2 & 4** controllers.
- Provides a digitally based signal that reacts quickly to changing temperature and humidity levels in your garden.
- Plastic enclosure resists dust and moisture.
- Integrated photocell allows the operator to monitor both day and night conditions.
- Green LED indicates that sensor is functioning properly.
- May be located up to 50 feet from the controller.

HYDROGEN PRODUCTS

HYDROGEN PRO WATER COOLED CO2 GENERATOR

Item No.	Description	MSRP
703740	HydroGen Pro Water Cooled CO2 Generator - LP	$399.95
703745	HydroGen Water Valve	$74.95
703750	HydroGen LP to NG Conversion Kit (SO)	$79.95

703740

703745

The HydroGEN is the world's first and only water cooled CO2 generator. Water cooling is capable of removing 86% of the heat produced by burning propane and has loads of other options and features not available in any other CO2 generator on the market, including a completely adjustable flame (can produce anywhere between 15 and 45 cubic feet of CO2 per hr), an adjustable water flow valve, no pilot light (flame is activated by water flow), a tip over cut off, an overheat shut down sensor, and the list goes on. The unit can easily be used in a closed-loop system with a small chiller and reservoir, or you can connect directly to your home water supply and drain to storage for reuse in your garden. The unit is compact in size and can be either hung or wall-mounted anywhere in your garden.

This optional valve (used in place of a pump) is designed to be installed in a pressurized water line and to be controlled by your CO2 monitor. This is a high quality solid brass valve designed for years of service. The valve has 1/2" NPT outlets that can be used to attach the valve inline with your existing plumbing or you can install on ½" hose barbs to make the connection. You will need either a pump or a valve but not both. 1 Year Warranty.

HYDROGEN WATER COOLED CO2 MINIGEN GENERATOR

Item No.	Description	MSRP
703755	HydroGen Water Cooled CO2 MiniGen LP Generator	$349.95

The MiniGEN is a propane fueled CO2 generator that comes with a removable heat exchanger that allows you to use the MiniGEN with or without water cooling. Designed for use in small gardens (10' x 10' or less), the unit measures only 6" x 7" x 10" and can be easily installed by wall mounting or by chain hanging. The 1,250 BTU/hr burner is operated by an electronic ignition with no standing pilot light. The unit has an anti-tip sensor and uses 12 volts to operate the ignition. The MiniGEN can be used with any CO2 monitor on the market, but when paired with the Hydro Innovations brand CO2 monitor, the result is a very safe, very cool, and very affordable alternative to CO2 bottles.

Visit www.n-g-w.com and click on "Product Videos" to see the HydroGen CO2 Generator in use.

HYDROGEN CO2 MONITOR

Calibrated and maintenance free, the HydroGen CO2 Monitor utilizes top quality SenseAir® brand CO2 detection technology. This monitor will work with any CO2 generator or bottle regulator. It is simply all you need to regulate CO2 in your garden.

- Programmed to turn on at 1300 ppm and off at 1500 ppm.
- Easy to read indicator lights show CO2 levels.
- Installs easily with our wall mount bracket.
- 120 Volt switched piggyback cord.
- "Just the basics" approach makes this unit very affordable.

Item No.	Description	MSRP
703746	HydroGen CO2 Monitor	$349.95

HYDROGEN ICE BOX THERMOSTAT

NEW!

This high quality fan speed controller was custom made for Hydro Innovations by Grow Zone. Designed to regulate the air conditioning through the Ice Box, our thermostat controls power to the fans with separate settings for lights on and lights off temperatures. During the on light cycle, fans are sped up to full power when cooling is needed and are slowed to an idle when the cooling needs are met. During the off light cycle the fans will again speed up when cooling is needed, but they will completely turn off when the cooling needs are met. With 7.5 amps available several fans can be run by one controller.

Item No.	Description	MSRP
703753	HydroGen IceBox Thermostat	$134.95

CO2 SYSTEMS & ACCESSORIES

GAS METER

Item No.	Description	MSRP
702313	Gas Meter	$28.95

Never run out of propane! Use this device to quickly see the level of propane in your tank. For all propane appliances with type 1 connection.

- Emergency flow restrictor in the event of a major leak.
- Low gas indication prevents unnecessary cylinder exchange or refills.
- Leak detection protects environment from gas emissions.

OPTIMUM GROWTH CO2 SYSTEMS

Item No.	Description	MSRP
702010	Optimum Growth CO2 System	$169.95
702015	Optimum Growth Deluxe CO2 System with Timer	$229.95

A quick release system designed to keep your room at its ideal CO2 levels for plant growth. Use the Optimum Growth CO2 System with the Controller or with your existing cycle timer. Don't have a timer? Purchase the Deluxe System which incorporates a built-in cycle timer. Optimum Growth Systems are designed to bring the PPM of CO2 to its optimal level in under 10 minutes and refill as needed. Using the Optimum Growth Deluxe CO2 System with a temperature/humidity/CO2 controller will give your grow-room its ideal CO2 levels whenever the exhaust fan isn't running, while maintaining the proper temperature and humidity.

LUXPRO® PROGRAMMABLE OUTLET THERMOSTAT

Item No.	Description	MSRP
734130	Luxpro® Programmable Digital Thermostat	$63.95

Programmable outlet thermostat allows control any 120 volt device up to 15 amps. Use with a fan or air conditioner for cooling purposes or use with a space heater for heating purposes.

- Separate programs for heating and cooling.
- Setting Range 45°F to 90°F (7°C to 32°C) with F/C selectable.
- Temporary temperature override and a manual hold.
- Adjustable temperature differential/cycle rate.
- Mode slide switch and a positive on/off switch.
- 120VAC outlet powered.
- 12 hour clock only. 2 G13A size 1.5V alkaline batteries included (for clock only). On-screen low battery indicator.
- Battery free memory storage.
- 5 minute short cycle protection.
- Time and temperature alternate in display.
- 3 year warranty.

CO2 TEST KITS

Item No.	Description	MSRP
702305	CO2 Test Kit	$19.95
702300	CO2 Detector Tubes	$43.95/box

Product 702305 includes: 1 - 100cc syringe, 2 - rae systems test tubes and instructions.

Product 702300 has a range: 300 - 5000 ppmv, Sample Volume: 100 ml, Sample Time: 2 min., Color: White to Purple. **Box contains 10 tests.**

Since 1998, Sentinel has been providing the best and most reliable controllers and timers you can buy. Visit www.growgps.com for more product information and tutorial videos.

SENTINEL

3 Year Warranty

DRT-1 – DIGITAL RECYCLING TIMER

100% digital recycling timer. Allows the user to set the on & off times in hours, minutes and seconds. No complex menus, single function push buttons for ease of use. Photocell allows daytime, nighttime or 24-hour operation. Two receptacles control up to 15-amps of power. Memory backed up with lithium battery. Re-settle circuit breaker built-in. 15 amps @ 120 volts | 32 to 120° F | 0-99% RH | Day, Night or 24-hour +/- 12 seconds/ year | 1 second | 23 hours, 59 min, 59 sec.

Item No.	Description	MSRP
702500	DRT-1/Digital Recycling Timer	$124.95

MDT-1 – MASTER DIGITAL TIMER

100% digital lighting and recycling timer that combines 2 main timing functions in one convenient package. Control lighting schedules with 24-hour time clock. The MDT-1 has an integrated digital recycling timer can operate daytime, nighttime or 24 hours a day. Digital recycling on and off times can be programmed in hours, minutes and seconds. The Hi-Temp shutdown feature allows the user to set a maximum temperature. In the event of overheating, the MDT-1 will shut off the lighting. If overheating event happens, the unit logs the max temperature and the time it occurred. Hot start prevention monitors the incoming power and will disable the HID lights in the event of a power failure. After a user selectable delay, the HID lamps are permitted to re-start. 15 amps @ 120 volts | 32 to 120° F | 0-99% RH | Day, Night or 24-hour +/- 12 seconds/ year | 1 second | 23 hours, 59 min, 59 sec.

Item No.	Description	MSRP
702505	MDT-1/Master Digital Timer	$219.95

DIGITAL CONTROLLERS

COOL-1 – COOLING THERMOSTAT

A simple device to control the temperature of an area. Any cooling device that operates on 120 volts and is 15-amps or less can plug into the COOL-1. Once connected to the COOL-1, the device is turned on & off when the temperature changes. Very similar to the thermostat in your home. Set the temperature you want to maintain, and the thermostat activates when it senses a change in temperature. 15 amps @ 120 volts | 50 to 115° F | Deadband 5 degrees F | > 10 years | 15-amps / 3/4 HP

Item No.	Description	MSRP
702510	COOL-1/Cooling Thermostat	$69.95

UTC-1 – UNIVERSAL TEMPERATURE CONTROLLER

Simple to use, 100% digital temperature controller. Photocell allows separate day and night temperature settings. Record and recall minimum and maximum temperature levels. Features a heating or cooling mode with adjustable deadband and 16 ft remote probe. 15 amps @ 120 VAC | 32 to 120 degrees F | UTC-1 +/- 15'F

Item No.	Description	MSRP
702515	UTC-1/Universal Temperature Controller	$144.95

PXM-1 – POWER EXPANSION MODULE 120 VOLT

Power Expansion Modules increase the number or size of lights, fans, air conditioners and pumps in your growing area that can be automated. Install the PXM by connecting the pre-wired trigger cable into any controller or timer that is 120 volts. Then locate a suitable circuit and plug in the pre-wired #14 gauge cable into the power outlet of your choice. Plug the devices that are to be controlled into the PXM and you are ready to go. 15-amps @ 120 VAC | 120 VAC, 16 foot, Nema 1-15 | 1200 watts | 14,000 BTU @ 120 Volt

Item No.	Description	MSRP
702545	PXM-1/Power Expansion Module 120 Volt	$99.95

PXM-2 – POWER EXPANSION MODULE 240 VOLT

Power Expansion Modules increase the number or size of lights, fans, air conditioners and pumps in your growing area that can be automated. Install the PXM by connecting the pre-wired trigger cable into any controller or timer that is 120 volts. Then locate a suitable circuit and plug in the pre-wired #14 gauge cable into the power outlet of your choice. Plug the devices that are to be controlled into the PXM and your are ready to go. 15 amps @ 240 VAC | 120 VAC, 16 foot, Nema 1-15 | 2400 watts | 24,000 BTU @ 240 Volt

Item No.	Description	MSRP
702550	PXM-2/Power Expansion Module 240 Volt	$119.95

EVC-1 – ENVIRONMENTAL CONTROLLER

The EVC-1 provides extreme flexibility in reliable solid-state environmental controller. Selectable CO2, temperature and humidity modes allow the user to control temperature and humidity separately or together. Built-in photocell activates CO2 device during the day. Night device outlet can control an exhaust fan/sulfur burner, etc. 15 amps @ 120 VAC | 32 to 120 degrees F | 0-99% rH | +/- 2' F | +/- 7% rH

Item No.	Description	MSRP
702520	EVC-1/Environmental Controller	$199.95

EVC-2 – ENVIRONMENTAL CONTROLLER

The EVC-2 controls your temperature and humidity with digital accuracy. Photocell allows day/night temperature and humidity settings and also provides daytime CO2 operation. The remote combination temperature and humidity probe allows the probe to be placed near plant canopy. It records and recalls minimum and maximum temperature and humidity levels. The EVC-2 has two temperature modes, heating and cooling with separate humidity control to add or remove humidity. Adjustable temperature deadband. 15 amps @ 120 VAC | 32 to 120 degrees F | 0-99% rH | +/- 1'F | +/- 3% rH

Item No.	Description	MSRP
702525	EVC-2/Environmental Controller	$299.95

CHHC-1 – TOTAL ENVIRONMENTAL CONTROLLER

The CHHC-1 controls all of your growing area conditions accurately and reliably. First of all, it has all of the CO2 control features of the CPPM-1. It also has the ability to control 3 other devices, a cooling device, a heating device and a humidity device. This controller is simple to use. You can set separate day and night temperature settings as well as humidity settings. Records the min and max temperature, humidity and CO2 levels. Unlike some CO2 controllers, the CHHC-1 is able to be calibrated by the user with our "self calibration feature".

Item No.	Description	MSRP
702530	CHHC-1/Total Environmental Controller	$724.95

CPPM-1 – CO2 CONTROLLER WITH PHOTOCELL

The CPPM-1 controls your carbon dioxide levels with part-per-million accuracy. It uses a CO2 sensor that is extremely accurate and features a ten-year life expectancy. Our combination CO2 and light level sensor is housed in a separate remote sensor enclosure that can be located up to 100 ft from the controller. The CPPM-1 can also be connected to other controllers so that the CO2 is disabled (useful when operating exhaust fans). It can be operated in fuzzy-logic mode (for compressed CO2), or on-off (for CO2 generators).

Item No.	Description	MSRP
702532	CPPM-1/CO2 Controller with integrated photocell	$599.95

HPH-4 – HIGH POWER HID CONTROLLER

The HPH-4 High Power HID controller allows the user to connect up to (4) 1000 watt HID ballasts to one main control "relay". It is designed to safely control HID lights from a single 30-amp power source. It accomplishes this by using a 16 foot "trigger" cable that connects to a timeclock or the MDT-1. When the timer connected to the trigger cable turns on, the heavy-duty relay inside the HPH-4 is energized. When the relay is energized, the lights are turned on. 30-amps @ 240 VAC | 120 VAC, 16 foot, Nema 1-15 | 4000 watts | Four (4) ballasts | Heat sink cast aluminum | >10 years

Item No.	Description	MSRP
702535	HPH-4/High Power HID Controller	$174.95

HPH-8 – HIGH POWER HID CONTROLLER

The HPH-8 High Power HID controller allows the user to connect up to (8) 1000 watt HID ballasts to one main control "relay". It is designed to safely control HID lights from a single 50-amp power source. It accomplishes this by using a 16 foot "trigger" cable that connects to a timeclock or the MDT-1. When the timer connected to the trigger cable turns on, the two heavy-duty relays inside the HPH-8 is energized. When the relays are energized, the lights are turned on. 50-amps @ 240 VAC | 120 VAC, 16 foot, Nema 1-15 | 8000 watts | Four (8) ballasts | Heat sink cast aluminum | >10 years

Item No.	Description	MSRP
702540	HPH-8/High Power HID Controller	$269.95

CO_2 REGULATORS & GENERATORS

CO2-REG – CO2 REGULATOR

The CO2-REG controls the flow of CO2 and regulates the amount of CO2 with a precision flow gauge that can be set from 1/2 – 15 SCFH (standard cubic feet per hour). The color coded pressure gauge is easy to read and understand. Comes with a 6 foot power cord and 120 volt solenoid pre-wired. Ready to connect to a controller or a timer. Can be used with either 20 lb or 50 lb CO2 cylinders. The CO2-REG reduces the pressure from the cylinder from over 2000 psi down to 30 psi. Maximum inlet 3000 psi.

Item No.	Description	MSRP
702555	CO2-REG/CO2 Regulator	$149.95

CO2-EXP – CO2 EXPANSION REGULATOR

Designed to be used with the CO2-REG. Using the CO2-EXP together with the CO2-REG allows 2 tanks to be connected and controlled. Extend time between required tank charges. The connection to the CO2-EXP is low pressure making installation safe and easy. The CO2-EXP comes with it's own easy to read gauge and 1/4" interconnecting hose.

Item No.	Description	MSRP
702560	CO2-EXP/Expansion Regulator	$79.95

VARIABLE CO2 GENERATORS

Item No.	Description		MSRP
702565	VCG-27 LP/Propane CO2 Generator		$679.95
702567	VCG-27 NG/Natural Gas CO2 Generator		$679.95
702568	VCG-27 LP High Altitude Burner	NEW!	$679.95
702569	VCG-27 NG High Altitude Burner	NEW!	$679.95
702570	VCG-6 LP/Propane CO2 Generator		$489.95
702572	VCG-6 NG/Natural Gas CO2 Generator		$489.95
702573	VCG-6 LP High Altitude Burner	NEW!	$489.95
702574	VCG-6 NG High Altitude Burner	NEW!	$489.95

- Gas burning CO2 generators are the most cost effective way of producing CO2. The VCG series of generators are the safest and most advanced CO2 generators available today.
- Two models available, Propane (LP) and Natural Gas (NG).
- Variable CO2 output.
- Solid-state electronic ignition control module eliminates the open pilot flame.
- Tip-switch shuts of the gas flow in the event of a fall.
- VCG-27 comes complete with 10 brass burners pre installed & VCG-6 has 2.
- Brass burners are designed to burn clean and produce consistent blue flames.
- Open "air-cooling" module available.
- Dual redundant low-voltage solenoid valves add a second layer of safety.
- Complete with 12 foot hose and pressure regulator.

GREEN AIR PRODUCTS

Because of varying lead times on the Green Air product line, please check with our Customer Service Department for availability.

ATMOSPHERIC CONTROLS MULTI-FUNCTION

INTEGRATED COOLING THERMOSTAT & DEHUMIDISTAT/4 OUTLETS Model CT-DH-1

This CT-DH-1 is designed to turn "On" and "Off" exhaust fans and/or intake fans to remove unwanted atmosphere due to heat or humidity. This device is intended as a cooling and dehumidifying control. This controller is ideal for situations where excess heat and humidity need to be exhausted. Internal sensors will allow a 7° temperature comfort zone and a 7% humidity span (differential) between the time the fans go "Off" and come back "On" again. When either temperature or humidity exceeds the dial settings, all four outlets will turn "ON", activating any cooling or exhaust equipment plugged into the controller.

Item No.	Description	MSRP
702330	Integrated Cooling Thermostat & Dehumidistat/4 Outlets	$205.00

INDEPENDENT COOLING & HEATING THERMOSTAT/4 OUTLETS Model CT-HT-2

This controller features fully independent sensors for cooling and heating equipment. The cooling thermostat activates the left outlets of the controller and the heating thermostat activates the right outlets. If you require a tighter control of your temperature than the internal heating\cooling thermostats allow, alternate sensors are available with a 3º differential External Coil or Remote Bulb Thermostat.

Item No.	Description	MSRP
702350	Independent Cooling & Heating Thermostat/4 Outlets	$205.00

SYNCHRONIZED COOLING THERMOSTAT/DEHUMIDISTAT/4 OUTLETS CT-DH-3 & CT-DH-3P

While the CT-DH-3 has many applications, it was primarily developed to be used with CO2 equipment and exhaust type fans. Internal sensors will allow a 7° temperature comfort zone and a 7% humidity (differential) between the time the fans go "Off "and come back "On" again. Temperature or humidity rise will activate the right hand outlets and deactivate the left hand outlets. The CT-DH-3 has an internal relay that automatically switches power from the left side (CO2 Outlets) to the right side (Exhaust Outlets) of the unit when either temperature, humidity or both are in excess of the dial settings. Plug the controller into a power surge protector to protect your valuable equipment, and then plug the surge protector into a 110 wall outlet. Set the temperature and humidity to the desired settings. The left side of the controller is normally in the "ON" position and is able to activate CO2 equipment as needed.

702340

Item No.	Description	MSRP
702335	Synchronized Cooling Thermostat / Dehumidistat/4 Outlets	$240.00
702340	Model CT-DH-3P with light activated photosensor	$300.00

MICROCLIMATE CONTROLLER SYSTEM/8 OUTLET Model MCC-1

The Micro Climate Controller MCC-1 is designed to perform all the major atmospheric and timed functions required in an automated growth environment including temperature, humidity, carbon dioxide enrichment, lighting and irrigation control. The controller incorporates an external coil cooling thermostat, a dehumidifying humidistat, a 24-hour clock timer, a photo-sensor and a repeat cycle timer. Automatic override and defeat systems coordinate controls to consider all possible variables. The MCC-1 is enclosed in a black anodized, brush finish aluminum housing. All connections are standard 3-prong grounded plugs and receptacles. Operates on 110VAC with 15 Amp switching capacity.

Item No.	Description	MSRP
702355	Microclimate Controller System / 8 Outlet	$835.00

ATMOSPHERIC CONTROLS SINGLE-FUNCTION STATS

TOTAL HUMIDITY CONTROLLER - HUMIDIFY & DEHUMIDIFY Model THC-1

Item No.	Description	MSRP
702375	Total Humidity Controller - Humidify & Dehumidify	$155.00

- Control humidity automatically and accurately with Green Air Products Total Humidity Controller. The THC can be switched between humidify and dehumidify to remove unwanted atmospheric moisture accumulating within an enclosed area or to add needed moisture to the air by means of humidification.
- In the dehumidifying mode high humidity conditions will activate fans or other dehumidifying apparatus until level drops approximately 7% in relative humidity. At this point dehumidifying equipment is disabled until humidity increases again 7%.
- In the humidifying mode this control operates fogging or other humidifying equipment by activating switches, motors, valves or pumps. Humidifiers can be precisely controlled according to atmospheric humidity to create ideal conditions for any environment.

TIMERS – CYCLE TIMERS

CHRONOMETRIC SEQUENTIAL TIMER Model CST-1

Item No.	Description	MSRP
702379	Chronometric Sequential Timer	$275.00

The CST-1 has solved the age old problem of accurate short cycle timing. The only unit of it's kind designed specifically for the control of grow systems. Easy to set and operate. Solid state time counter with adjustable frequency and duration. The CST-1 function timer has many uses and only a few of them include: fogging or misting, spray stakes or drip system timing, air pumps, CO2 equipment and intake\exhaust fan control.

REPEAT CYCLE TIMER Model CYCLESTAT 4P

Item No.	Description	MSRP
702385	Repeat Cycle Timer	$190.00

The Cyclestat 4P is perfect for plant zone environments, reptile habitats or any other application requiring automatic short cycle switching. No programming required. Easy to set and operate. Microprocessor time counter with adjustable frequency and duration. The Cyclestat 4P timer has many uses. Only a few of them include: fogging or misting, spray stakes or drip system timing, air pumps, CO2 equipment and intake or exhaust fan control. The Cyclestat may be set for interval and cycle of timed events. Interval is the time between "ON" cycles. The interval knob may be set from 5 minutes to 8 hours. Set this for desired time between functions. Cycle is the length of time that a specific function or condition must be maintained. Cycle may be set from 5 seconds to 30 minutes.

TIMERS – LIGHTING TIMERS

These time switches are designed to operate high load lighting equipment. They consist of a premium quality precision synchronous clock motor and a high amperage switching circuit. These controllers are housed in black anodized brush finish aluminum enclosures which will not break, chip or corrode. Operates with a maximum combined outlet switching capacity of 40 amps. Plug or wire the power cord into a receptacle capable of handling the maximum total combined amperage draw of your equipment load. Plug lighting equipment into outlet receptacles located on each side of controller. Timer has 96 non-detachable 15 minute on\off trippers.

Item No.	Description	MSRP
702390	4 Light Timer - 120 Volt (LT4-120)	$335.00
702395	4 Light Timer - 240 Volt (LT4-240)	$400.00
703400	8 Light Timer - 240 Volt (LT8-240)	$465.00

The LT4-120 provides four 10 amp 120 volt outlet receptacles, each capable of powering up to 1000 watts of lighting equipment.

The LT4-240 offers four 10 amp 240 volt outlets and will power lighting equipment up to 1000 watts each.

The LT8-240 provides eight 5 amp 240 volt outlet receptacles, each capable of powering up to 1000 watts of lighting equipment.

4 LIGHT TIMER - 120 VOLT & 240 VOLT & 8 LIGHT TIMER - 240 VOLT

702390

702395

702400

CO_2 MONITORS & CONTROLLERS

BOTTLED CO2 REGULATOR & SOLENOID Model BCDE-1

Green Air Products bottled CO2 emitter systems combine a forged brass flow gage regulator with a UL/CE/CSA certified emitter solenoid valve. These systems offer a flow range from 7-20 SCFH. The BCDE system come with 10 feet of clear tubing, spring clamps, and a grounded 6ft 120 volt power cord.

Item No.	Description	MSRP
702404	Bottle CO2 Regulator & Solenoid	$325.00

12 VOLT AC/DC ADAPTOR & REPLACEMENT CO2 HOSE

Replacement AC/DC adaptor for CO2 generators.

This replacement hose is for use with all Green Air Generators

Item No.	Description	MSRP
703476	12 Volt AC/DC Adaptor	$26.50
702435	Replacement CO2 Hose	$55.00

CO2 SET POINT CONTROLLER Model SPC-1

Item No.	Description	MSRP
703423	CO2 Set Point Controller	$665.00

This new easy to install and to operate CO2 enrichment controller is factory calibrated and inspected for optimum performance. The SPC-1 is designed with a photo sensor to defeat CO2 enrichment during dark periods and a large easy to read real-time LED display. The SPC-1 also is programmed with a preset differential (hysteresis) of 20 PPM and offers an elevation adjustment feature to fine tune performance. Quick Start Installation Instructions are available in English and Español. Like all of Green Air Products high quality controllers, the SPC-1 is constructed with durable components and a rust and scratch resistant, black anodized aluminum chassis to ensure that this controller will perform as expected for years to come. Operates on 120 Volt AC with 12 Amp switching capacity.

CDDS-2 & CDM-6000 SENSOR Model CDMC-6

Item No.	Description	MSRP
703415	CDDS-2 & CDM-6000 Sensor	$990.00

These Green Air Products systems are a breakthrough in CO2 detection and control. The CDMC-6 system is designed to sample the air and learn the characteristic of your space, then make adjustments as necessary to ensure a constant level of CO2. The CDM-6000 monitor employs a passive infrared sensor which samples the air once every second and then sends the sample data to the CDDS-2 sequencer. The CDDS-2 then activates or deactivates your CO2 enrichment or venting (exhaust) equipment to maintain desired CO2 PPM. The CDDS-2 uses a sophisticated adaptive algorithm or "Overshoot Protection Logic" to learn the dynamics of the space being controlled. This allows the systems to avoid dramatic overshoots inherent to set point controllers or timed CO2 enrichment. These learned parameters are stored in the memory, even when the 'POWER' is off, or until you reset the unit.

The CDMC-6 system offers a large LCD screen displaying the current CO2 levels in PPM. Set your desired CO2 level, 'Hysteresis' and 'Elevation' to maintain precise levels without guesswork.

The CDMC-6 system can be using for enriching or venting CO2 and incorporates a photosensor to defeat CO2 during dark periods (Night).

CO_2 GENERATORS WITH LP RATED HOSES

Item No.	Description	MSRP
703430	CD-3LP - CO2 Generator 3 cuft/hour Propane	$510.00
703435	CD-6LP - CO2 Generator 6 cuft/hour Propane	$600.00
703440	CD-12LP - CO2 Generator 12 cuft/hour Propane	$685.00
703450	CD-36LP - CO2 Generator 36 cuft/hour Propane	$845.00
703455	CD-3NG - CO2 Generator 3 cuft/hour Natural Gas	$545.00
703460	CD-6NG - CO2 Generator 6 cuft/hour Natural Gas	$620.00
703465	CD-12NG - CO2 Generator 12 cuft/hour Natural Gas	$700.00
703475	CD-36NG - CO2 Generator 36 cuft/hour Natural Gas	$865.00

LIQUID PROPANE & NATURAL GAS CO2 GENERATOR MODELS

Carbon dioxide generators operate by burning carbonaceous fuels such as propane or natural gas. The burners used in Green Air Products CO_2 generators are specially designed to maximize the production of CO_2 and minimize heat as a by-product. Green Air Products generators provide CO_2 far more economically than any other means of enrichment. A constant burning pilot is used to ignite the gas when the generator is turned on. A thermocouple is used to monitor the pilot flame. If the pilot flame is lost, a safety valve will close so that unburned fuel will not be released into the enclosure. CO_2 Generator operations may be automatically functioned according to actual ambient values when installed in conjunction with the CDMC. The generators may be controlled with timers such as the Cyclestat 4P. This control device continually samples the level of carbon dioxide in the growing area and activates the generator whenever CO_2 levels do not meet your predetermined values. Generators are easily installed, dependable and efficient. Transformer included. Operates on 110 volt AC.

PLUG N GROW PRODUCTS

CYCLE TIMER WITH PHOTOCELL Model iGS-011

The iGS-011 cycle controller represents an easy solution to periodic control day and night or just day only. The integrated photocell can differentiate day and night.

- ON time from 30 seconds to 60 minutes.
- OFF time from 1 minute to 12 hours.
- Features 3 year warranty.
- Maximum load: 120 volt AC, 15 Amp, 1 HP.

Item No.	Description	MSRP
703500	iGS-011 Cycle Timer with Photocell	$99.00

HIGH TEMPERATURE WATCHDOG Model iGS-012

Plug iGS-012 in the 110-120 volt wall socket chosen to supply your lighting equipment. Plug lighting equipment in 110-120 volt output of the iGS-012 (maximum charge of 15 Amps). Keep temperature sensor far of any source of heat. Temperature sensor should be located above the floor level and near top of plant canopy.

- Can control lighting equipment plugged in a iLS4-120, iLS4-120S or iLS4-240 by connecting sense cord of iLS4 to iGS-012. The iLS4-120, iLS4-120S and iLS4-240 can be connected in a row to control many pieces of lighting equipment. Features 3 year warranty.

Item No.	Description	MSRP
703502	iGS-012 High Temperature Watchdog	$109.00

DAY & NIGHT TEMPERATURE CONTROL Model iGS-021

The iGS-021 temperature controller will operate your heating or cooling equipment in accordance to user day and night set points. Does not have a display. Features 3 year warranty.

Item No.	Description	MSRP
703510	iGS-021 Day & Night Temperature Control	$109.00

PLUG-IN MANUAL VARIABLE SPEED CONTROL Model iGS-070

This module enables the user to adjust fan speed manually. Works only with magnetically driven fans. Connect up to 750 watts to a single unit. Features 3 year warranty.

Item No.	Description	MSRP
703550	iGS-070 Manual Variable Speed Control (SO)	$79.00

DAY & NIGHT RELATIVE HUMIDITY CONTROL WITH DISPLAY Model iGS-030R

The iGS-030 relative humidity controller will operate your humidifying or dehumidifying equipment in accordance to user day and night set points. The ambient relative humidity is displayed on the luminous bar graph. The precision RH sensor (3%) can be calibrated and the differential of operation is adjustable. This controller is also available with a remote (10') sensor (iGS-030R).

- 3% precision RH sensor.
- 0-100% RH control range.
- Maximum load: 120 volt AC, 15 Amp, 1 HP.
- Features 3 year warranty.

Item No.	Description	MSRP
703530	iGS-030 with Remote	$239.00

DAY & NIGHT COOLING & DEHUMIDIFYING CONTROL WITH DISPLAY Model iGS-040R

The iGS040R Cooling and dehumidifying controller will operate your inlet and/or exhaust fans (or any other cooling and/or dehumidifying equipment) in accordance to user temperature and relative humidity day and night set points. Temperature and relative humidity values can be viewed in real time on the luminous bar graph. The differential is factory preset to ± 2.5% for RH and ± 1° C for temperature. Of course these values can be increased by the user. This controller also offers the user a low temperature limit which when set will interrupt the equipment in the case of excessive cooling. This controller comes with remote (10 feet) sensor. Features 3 year warranty.

Item No.	Description	MSRP
703540	iGS-040 with Remote (SO)	$289.00

DAY & NIGHT TEMPERATURE CONTROL WITH DISPLAY Model iGS-020

Item No.	Description	MSRP
703515	iGS-020 Day & Night Temperature Control with Display (SO)	$189.00
703520	iGS-020 with Remote (SO)	$199.00

The iGS-020 temperature controller will operate your heating or cooling equipment in accordance to user day and night set points. The ambient temperature is displayed on the luminous bar graph. The precision temperature sensor (1° C) can be calibrated and the differential of operation is adjustable. This controller is also available with a remote (10') sensor (iGS-020R).

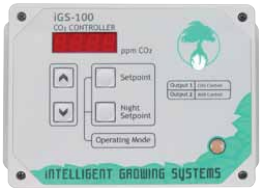
- ±1°C precision temperature sensor.
- 0° to 40° C control range.
- Features 3 year warranty.
- Maximum load: 120 volt AC, 15 Amp, 1 HP.

CO2 CONTROL WITH HIGH TEMPERATURE SHUT OFF FUNCTION Model iGS-061

Item No.	Description	MSRP
703545	iGS-061 CO2 Control with High Temperature Shut Off	$639.00

The iGS-061 will perform CO2 enrichment during the day only (when light is sensed by the photocell). The enrichment starts when the CO2 concentration falls below the set point minus the differential. (i.e. Set point = 1200 ppm Differential = 150, CO2 enrichment starts below 1050 ppm and stops beyond 1350 ppm). The differential modifies itself until the controller senses no more overshooting or undershooting of user set point. Fixed differential values can also be set for more specific needs. As a safety feature, the high temperature shut off function will inhibit operation while temperature is over the user setting. This interruption is maintained until temperature falls below the user high temp setting. To inhibit this feature, simply set the limit to its highest value. The controller can also be set to vent (extract) CO2. In this case, the high temp shut off feature becomes a low temp shut off limit to prevent excessive cooling conditions. Features 3 year warranty.

CO2 CONTROL WITH AUXILIARY SHUT OFF OUTPUT Model iGS-100



Item No.	Description	MSRP
703555	iGS-100 CO2 Control with Auxiliary Shut Off Output (SO)	$769.00

The iGS-100 CO2 controller is an essential control tool to efficiently and economically use CO2 enrichment for higher growth rates or to fulfill minimum ventilation needs day and night. The display shows the ambient CO2 concentration within ±75 ppm at all times. The internal CO2 infrared sensor reads values from 0 to 5000 ppm. The air sampling is optimized by means of an integrated fan. The control unit can be positioned up to 6 feet from the output box (a cable up to 50 feet can be used). The controller will automatically adjust its operating differential when the CO2 concentration overshoots or undershoots the desired set point. Two set points are used by the controller : day and night set points. This unit is 120 volts and uses 12 watts of power.

Maximum load both outputs: 15 A 120 volt AC
Battery-backed microprocessor control
Sensor and Control range : 0-5000 ppm
Automatic differential compensation: ± 20 ppm
Annual drift of the CO2 sensor: ± 75 ppm
Calibration of the CO2 sensor: 1 year
Features 3 year warranty.

DAY & NIGHT CO2, RELATIVE HUMIDITY & TEMPERATURE SMART CONTROL - iGS-220

Item No.	Description	MSRP
703565	iGS-220 Day & Night CO2, RH & Temperature Smart Control	$927.95

The iGS-220 CO_2 relative humidity and temperature controller is the simplest and most complete solution to integrated climate management and CO_2 enrichment or venting. The resulting climate can increase yields and quality of harvest while insuring CO_2 and energy savings. The electronic module displays the actual values of the CO_2, relative humidity and temperature sensors. The controller includes an internal fan to speed up the air sampling process thus yielding better climate control. The control unit can be positioned up to 6 feet away from the output box (a cable up to 50 feet can be used). The control unit logs the last 24 hours minimum, maximum and average CO_2 concentration, relative humidity and temperature values. Multiple operation modes are available and the differential of operation is adjustable.

Battery Backed microprocessor (36 hrs battery) • Power supply: 120 volt AC • Consumption: 00 mA 12 watt Annual drift: ±20 ppm • Max. load both outputs: 15 A 120 volt AC • CO_2 Sensor and Control range: 0 - 5000 ppm • Temp Sensor and control range : -20°C to +50°C (-40°F to +122°F) • Auto differential adjustment: 50 to 800 ppm • Accuracy of the CO_2 Sensor: ±75 ppm • Annual drift: ±1° C (2° F) • Calibration of the CO_2 Sensor: 1 yr • Sensor: 0.5° C (1° F) • Calibration of the temperature Sensor: Factory calibrated • RH sensor and control range: 0 - 100% RH • Auto differential adjustment: 3 to 10% • Accuracy of the RH sensor: ±3% Annual drift: < 1% • Calibration of the RH sensor: Auto differential adjustment: 1° C to 10° C (-1.8°F to +18° F) • Warranty: Features 3 year warranty. • Factory calibrated

AUTOMATIC DIALER & MOVEMENT DETECTOR ALARM Model iMS100

The iMS100 is a security system which will detect intruders and fires in your home, office, business or wherever it is set up. It is designed to give you an early warning by calling up to 6 pre-stored phones/ pager with your own voice message. It is simple to set up and use, and will monitor your home or business without any monthly charge. Features 3 year warranty.

Item No.	Description	MSRP
703600	iMS100 Automatic dialer and movement detector alarm	$159.95

PLUG-IN 12 AMPS OFF-SWITCHED RELAY WITH LOW CURRENT 120V TRIGGER CORD Model iLS120-OFF

This 120 volt AC Module can switch off 120 volt AC equipment while another is being activated. Switch off fans, while CO2 or sulfur vaporizing is in progress or dehumidifier when fans are on. Easy to set-up. Features 3 year warranty.

Item No.	Description	MSRP
703590	iLS120-OFF Plug-in 12 amps on-switched relay with low current 120 volt trigger cord (SO)	$89.00

LIGHTING LOAD SWITCH BOX WITH INTERNAL 0-20 MINUTE ON DELAY 240V OUTPUTS Model iLS4-240

Item No.	Description	MSRP
703580	iLS4-240 Light Load Switch with Internal 0-20 Minute On Delay 240 Volt Outputs	$239.00

This switching module will switch up to four 1000 watt lights using a low power 120 volt AC trigger cord. An internal On-delay timer can be set to prevent hot bulb startups or set to sequentially turn on groups of up to four lights. This model supplies 240 volt AC to your equipment. Features 3 year warranty.

IGS CO2 GENERATORS & GENERATORS WITH HEAT EXCHANGERS

Item No.	Description	MSRP
703700	IGS-LP4 CO2 Generator LP-12,000 BTU (SO)	$849.00
703705	IGS-NG4 CO2 Generator NG-12,000 BTU (SO)	$879.00
703710	IGS-LP8 CO2 Generator LP-24,000 BTU (SO)	$929.00
703715	IGS-NG8 CO2 Generator NG-24,000 BTU (SO)	$969.00
703720	IGS-LP4X CO2 Generator with Heat Exchanger LP-12,000 BTU (SO)	$959.00
703725	IGS-NG4X CO2 Generator with Heat Exchanger NG-12,000 BTU (SO)	$989.00
703730	IGS-LP8X CO2 Generator with Heat Exchanger LP-24,000 BTU (SO)	$1,079.00
703735	IGS-NG8X CO2 Generator with Heat Exchanger NG-24,000 BTU (SO)	$1,129.00

- Safety panels to avoid burning.
- Safe, easy to use and highly energy efficient.
- Safe electronic pilot: no manual starting button nor continuous flame.
- Internal electronic control to avoid excessive heating and to turn off the unit in case of tipping over.
- Dimensions: 16.5" D x 20.5" H x 9.5" W.

Heat Exchanger Additional Features:

- Use 6 inch ducting to exhaust heat from unit.
- Heat exchanger may be ducted to supply heat to living space (fan suggested) without introducing CO2.
- Dimensions: 16.5" D x 20.5" H x 9.5" W.

SOLATEL PRODUCTS

LP-120S AND LP-240S LAMP PRO TIMERS

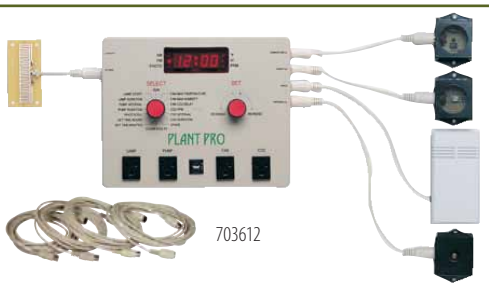
Item No.	Description	MSRP
703625	LP-120S Lamp Pro Timer (120 Volt 15 Amp)	$293.95
703630	LP-240S Lamp Pro Timer (240 Volt 30 Amp)	$335.95

703625 703630

These easy to use timers have a single select knob that clicks to any of 16 time settings. Settings include an accelerated 18 hour day cycle running ON 6 hours / OFF 12 hours. Thirteen normal 24 hour day settings cover ON 8 / OFF 16 to ON 20 / OFF 4 in one hour increments. Continuously ON and OFF settings are also included. The Lamp Pro sequences two outlets on, 20 seconds later the next two, and 20 seconds later the final two. This reduces electrical problems. Turn off has a 5 second delay. The LP-120S (120 volt 15 amp) uses standard 120 volt type outlets and power cord plug. The LP-240S (240 volt 30 amp) has 240 volt outlets and an 6 foot power cord with unterminated wires. It can control up to six 1000 watt fixtures.

PLANT PRO™ ENVIRONMENTAL CONTROLLER

Item No.	Description	MSRP
703610	HGC-3 Plant Pro™ Controller with CO2	$1,049.95
703607	Temp Sensor (Special Order)	$44.95
703609	Photocell Sensor (Special Order)	$37.95
703606	CO2 Sensor (Special Order)	$514.95
703612	EXT-2 (Set of 4) (Special Order)	$36.95



703612

Precision electronic control for all environmental variables. Outlets for lighting, irrigation, ventilation, and CO2. High accuracy sensors for temperature, humidity, and flood. Optional Photocell (light) and CO2 sensors available. Sensors have flexible 10 foot cables (25 foot total with optional extensions). This allows the Plant Pro™ to be located for easy monitoring and adjustment, even outside the grow room, if desired. The Plant Pro™ unique simplified operation allows for easy, quick setup using only two control knobs and a large digital display. One knob to select a setting, a display to show the setting, and a second knob to change the setting. Measurements from sensors can also be displayed. Easy to use digital clock provides exact timing. CO2 control includes timed or optional CO2 sensor. Adjustable fan CO2 delay allows extra time for CO2 absorption by plants before ventilation fan comes on.

FLOOD DETECTOR

Detects overflow of water or nutrient if pipe breaks or drains clog. Two 120V 15A outlets: one ON when sensor wet, other ON when sensor dry. One outlet could turn on an alarm during a flood. The other outlet could turn off a nutrient pump during a flood. Two second delay minimizes false alarms. Sensor has 10' cable. Hold Switch selects automatic or manual reset when wet sensor dries out. Manual reset requires user to reset switch for outlets to respond to dry sensor.

Item No.	Description	MSRP
703611	Flood Detector Stand Alone (Special Order)	$149.95

CO2 300 CARBON DIOXIDE CONTROLLER

Simply set the desired CO2 level and the CO2-300 does the rest. The Sensor Unit has a display and 3 buttons (SET, +, and -). Normally it displays actual room CO2 PPM (Parts Per Million). Using the buttons, you can display and change the set point (also in PPM). The Sensor Unit is connected to the Control Unit by an 8 foot cable. The Control Unit plugs into any 120V outlet. If you wish to defeat CO2 dispensing when your lamp is off, plug the Control Unit into your lamp timer or a timer running the same schedule. The CO2 dispensing equipment (tank solenoid valve or generator) plugs into the 120V outlet on the front of the Control Unit.

Item No.	Description	MSRP
703614	CO2 300 (Special Order)	$629.95

PWX-1 POWER EXPANDER

Power Expanders allow you to turn on more high powered loads from a timer or environmental controller. Usually the electrical outlet for your timer or controller can only service a single 1000 watt fixture without tripping the circuit breaker. By utilizing other outlets (on separate circuit breakers) more fixtures can be added and still be controlled by your timer. These Power Expanders have ready to go outlets (120 volt), a 6 foot trigger cord.

Item No.	Description	MSRP
703615	PWX-1 Power Expander - 120 Volt 15 amp	$103.95

THP 100 ATMOSPHERIC CONTROLLER

The Solatel THP-100 coordinates ventilation and CO2 (carbon dioxide). This is required when temperature and humidity are controlled by a vent or exhaust fan. Hot or humid air is blown out of the growing area and fresh air is then drawn in. This continues until both temperature and humidity fall below the dial settings. CO2 is only dispensed during the day when plants have light for photosynthesis. It is not dispensed when the fan is operating because this would waste CO2. The THP-100 provides all of these functions. When connecting CO2 equipment, a repeat cycle timer or CO2 concentration controller (not included) is plugged into the THP 100. The CO2 tank valve or CO2 generator then plugs into the timer or controller.

Item No.	Description	MSRP
703613	THP 100 Atmospheric Controller	$272.95

PWX-240-4 POWER EXPANDER

Timer not included

Item No.	Description	MSRP
703617	PWX-240-4 Power Expander	$241.95

PWX-240-4 Power Expander lets you control up to four 1000 watt 240 volt lighting systems. Comes pre-wired with 12 gauge 6' power cable and a 6' trigger cord with a 120V plug. The power cable connects to a 240V 20A service. The trigger cord can be connected to any 24 hour timer/controller. The trigger cord turns four outlets on at once.

PWX-240-U POWER EXPANDER

Timer not included

Item No.	Description	MSRP
703618	PWX-240-U Power Expander	$262.95

PWX-240-U Power Expander lets you control up to four 1000 watt 240 volt lighting systems. Comes Pre-wired with a 10 gauge 6' power cable and a 6' trigger cord with 120V plug. The power cable connects to a 240V 30A service. The trigger cord can be connected to any 24 hour timer/controller. The trigger cord turns on all four 240V outlets at once. PLUS: two 120 volt utility outlets that are always on with an added 10 amps each. The trigger cord has no effect on the 120V outlets.

PWX POWER EXPANDERS

703620

Timer not included

Item No.	Description	MSRP
703620	PWX-240-6 Power Expander - 240V 30 amp	$262.95
703621	PWX-240S Power Expander (sequential)	$313.95

PWX-240-6 Power Expander lets you control up to six 1000 watt 240 volt lighting systems. Comes Pre-wired w/10 gauge 6' power cable and a 6' trigger cord with a 120 volt plug. The power cable connects to a 240V 30A service. The trigger cord can be connected to any 24 hour timer/controller. The Trigger cord turns all six outlets on at once.

The PWX240S (not shown) is similar to the PWX240-6 except that it sequences the outlet pairs on. The first outlet pair turns on immediately and the final 2 outlet pairs turn on 20 seconds apart. This helps avoid circuit breakers popping.

GAS PRO CO2 GENERATOR & CO2 400 CONTROLLER

Item No.	Description	MSRP
703635	Gas Pro 6 Burner NG CO2 Generator (SO)	$872.95
703640	Gas Pro 6 Burner LP CO2 Generator (SO)	$872.95
703645	Gas Pro 12 Burner NG CO2 Generator (SO)	$1,048.95
703650	Gas Pro 12 Burner LP CO2 Generator (SO)	$1,048.95
703655	Gas Pro 6 NG Generator with CO2 400 Controller (SO)	$1,246.95
703660	Gas Pro 6 LP Generator with CO2 400 Controller (SO)	$1,246.95
703665	Gas Pro 12 NG Generator with CO2 400 Controller (SO)	$1,430.95
703670	Gas Pro 12 LP Generator With CO2 400 Controller (SO)	$1,430.95
703632	CO2 400 Controller (SO)	$524.95

CO2 is needed by plants for proper growth. CO2 can be added by burning propane or natural gas - cheaper and easier to obtain than bottled CO2. The Gas Pro uses faster, more reliable, more efficient, electronic spark ignition. When the Gas Pro is turned on, spark and pilot gas start. When the pilot is lit, spark stops and main gas turns on and is lit by pilot. When the Gas Pro turns off, all gas turns off. Spark is better than standing/continuous pilot - they must be manually lit, burn all the time, and waste gas. Spark is faster and more reliable than a glow plug - no time needed for glow plug to heat up, spark ignites immediately. Both Propane and Natural Gas models available. Each have two sizes - a six burner and a twelve burner. The Propane model includes a regulator for connection to a propane tank. Gas hose (20 ft.) included with all models. Strong 18 gauge steel enclosure - powder coated for heat and rust resistance. Heat exchanger allows forced air cooling if desired. Plug the 120 volt power supply (included) into a controller or timer. Alternatively, the Gas Pro allows easy connection of a CO2 400 controller. Just plug CO2 400's 10 ft. cable into the connector on the side of Gas Pro. Extension cable available. No separate power supply needed - it draws power from the Gas Pro. Includes easy to use display and controls to view and adjust ppm levels.

HARVEST-MASTER® PRODUCTS

Harvest-Master® products are automated hydroponic grow room climate controllers. Harvest-Master® controller devices continuously control your crop condition and growth time. The controllers come ready to operate with factory preset settings. No Hassles! Scientists have researched and developed the optimum settings so that you obtain a "Great Harvest" for a wide variety of herbs, flowers and fruiting crops. Just set the grow cycle you want: Vegetative, Fast Flowering or Full Flowering for a perfect optimum growth climate day and night. Settings can be changed as required, but we advise that factory settings be used initially.

Self Learning Capability & Automatic Room Calibration

- As soon as Harvest-Master® is switched on, it begins learning how your room performs and reacts. Hour by hour, learning about temperature and humidity changes continuously, all day every day.
- This information enables Harvest-Master® to understand, calculate and predict how your devices will best balance temp, humidity and CO2 for the most gentle organic growing conditions.
- Harvest-Master® always makes the optimum decisions to ensure healthy vigorous crops.

HARVEST-MASTER® CLIMATE CONTROLLERS

Item No.	Description	MSRP
703300	Harvest-Master® Climate Controller	$899.00
703305	Harvest-Master® Climate Pro Controller	$1,599.00

Controls night and day length, temperature and humidity control, plus control up to 8 devices (or 7 and a cycle timer), for a balanced climate. All models come as a complete kit. The kit includes: controller, sensors, remote relay switches. Sensors are high accuracy types, for temperature, humidity and CO2. 3 remote relay switches are included for lights and heaters to put on different electrical circuits.

The "Pro" model is the same as the Climate model plus a CO2 sensor and a 4th relay switch.

HARVEST-MASTER® CLIMATE PRO PLUS CONTROLLER

Item No.	Description	MSRP
703310	Harvest-Master® Climate Pro Plus Controller	$2,099.00

Controls night and day length, temperature and humidity control, plus control up to 8 devices (or 7 and a cycle timer), for a balanced climate. All models come as a complete kit. The kit includes: controller, sensors, remote relay switches. Sensors are high accuracy types, for temperature, humidity and CO2. 3 remote relay switches are included for lights and heaters to put on different electrical circuits.

The "Pro Plus" model is the same as the Climate Plus model plus 8 additional inputs and outputs, to control advanced functions including automation or alarms which can drive the optional "Text Message" (product no. 703335) option.

HARVEST-MASTER® TEXT ME MODEM

Item No.	Description	MSRP
703335	Harvest-Master® Text Me Modem For Pro Plus Only (SO)	$867.00

The modem gives you instant text message updates, direct to your phone. Send 'status', to get an update from your Harvest-Master® controller, from anywhere! Turn the extra 8 outputs ON or OFF by text message. Get text messages for an alarm! Overheating, low water/fluid levels, or Intruders! (door/window switches, motion detectors).

CO2 EASi is intelligent control of CO2 and at the same time, an Intelligent Temperature controller when the COOL KIT is attached for additional automatic control of cooling units and or fans. As soon as CO2 EASi is switched ON, it learns how CO2 enrichment works in your room, including whether you use bottle or burner. Continuous learning and adjustment all day, every day. CO2 EASi will understand, calculate and predict enrichment operations for optimum growth.

Consumption: Automatic calculation and display of CO2 consumption rate, with predicted bottle life remaining.

Efficiency Monitoring: Shows percentage of optimum CO2 enrichment time achieved. Automatic and continuous evaluation of cooling and exhaust systems efficiency. Identifies where improvements can be made for more growth, increased yield, reduced CO2 use and lower power costs.

HARVEST-MASTER® CO2 EASI UNIT

Item No.	Description	MSRP
703320	Harvest-Master® CO2 EASi Unit	$649.00

HARVEST-MASTER® CO2 EASI UNIT WITH KOOL KIT

Item No.	Description	MSRP
703325	Harvest-Master® CO2 EASi Kool Kit	$109.90

HARVEST-MASTER® RELAYS

Item No.	Description	MSRP
703350	Harvest-Master® Relay - 120 volt	$79.90
703355	Harvest-Master® Relay - 240 volt	$159.00

Relay switches for you to plug and run: Lights, Fans, Heater or any other timed device. Each relay is rated to switch 15-amps. 120 Volt AC or 240 Volt AC:

• USA. 240v, 2-pole relay switches available. • Heavy Duty 3 phase 32-amp per phase type available.

Relays can be daisy chained with 4-way multi connectors to permit up to 6 relay switches to be switched ON by a single Harvest-Master® output signal (for up to 6 light arrays for example). NOTE: A maximum of 7 relay switches per controller output.

ECOPLUS® SUPREME INLINE FANS

Item No.	Description	CFM	MSRP
736600	EcoPlus® Supreme 4" Inline Fan	170	$135.95
736605	EcoPlus® Supreme 6" Inline Fan	440	$173.95
736610	EcoPlus® Supreme 8" Inline Fan	740	$220.95
736675	EcoPlus® Supreme 10" Inline Fan	780	$270.95
736680	EcoPlus® Supreme 12" Inline Fan	1060	$330.95
736685	EcoPlus® Supreme 12" Inline Fan - **240 Volt Only**	1060	$349.95

- The original, proven, high performance EcoPlus® fans.
- Very powerful and efficient motors.
- Durable steel housing with blue powder coated finish.
- Wall or ceiling mounting brackets attached for easy installation.
- Pre-wired with 120 volt power cord, except Product No. 736685 which is pre-wired with a 240 volt power cord.

ECOPLUS® CLASSIC INLINE FANS

Item No.	Description	CFM	MSRP
736430	EcoPlus® Classic 4" Inline Fan	160	$109.95
736435	EcoPlus® Classic 6" Inline Fan	340	$144.95
736440	EcoPlus® Classic 8" Inline Fan	590	$184.95
736445	EcoPlus® Classic 10" Inline Fan	730	$239.95
736450	EcoPlus® Classic 12" Inline Fan	980	$279.95

- Very powerful and efficient motors.
- Durable steel housing with black powder coated finish.
- Pre-wired with 120 volt power cord.
- Wall or ceiling mounting brackets attached for easy installation.

ECOPLUS® DUCTING DAMPERS

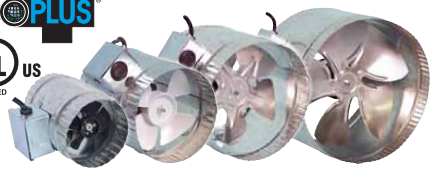
NEW! ECOPLUS

Item No.	Description	MSRP
736980	EcoPlus® Ducting Damper 4"	$17.95
736982	EcoPlus® Ducting Damper 6"	$19.95
736984	EcoPlus® Ducting Damper 8"	$29.95
736986	EcoPlus® Ducting Damper 10"	$39.95
736988	EcoPlus® Ducting Damper 12"	$49.95
736989	EcoPlus® Ducting Damper 14"	$59.95

These are excellent quality back draft dampers. They are made from heavy-gauge galvanized steel with heavy duty springs. They use both an embossed bead & rubber gasket to help keep ducting securely in place. They prevent back draft air when your fans are off.

ECOPLUS® INLINE DUCT BOOSTERS

ECOPLUS



Item No.	Description	CFM	MSRP
736650	EcoPlus® 4" Inline Duct Booster	70	$45.95
736655	EcoPlus® 6" Inline Duct Booster	160	$51.95
736660	EcoPlus® 8" Inline Duct Booster	370	$57.95
736665	EcoPlus® 12" Inline Duct Booster	650	$94.95

- Perfect for boosting air flow in long runs of ducting.
- Come completely wired with junction box, strain relief and power cord.
- Energy efficient and very quiet.
- Lightweight and easy to install.
- Fluted on both ends to receive ducting.
- Boxed in retail friendly packaging.
- 1 year warranty.

VORTEX INLINE POWERFANS

by ATMOSPHERE

Item No.	Description	CFM	MSRP
736700	4" Vortex Inline Fan	175	$168.95
736705	6" Vortex Inline Fan	450	$215.95
736710	8" Vortex Inline Fan	747	$270.95
736715	10" Vortex Fan	790	$290.95
736720	12" Vortex Fan	1140	$412.95

These high performance inline fans feature superior steel construction with powder coated baked paint and convenient North-American sizes from 4 to 12 inches. Speed controllable and balanced motors with permanently lubricated ball bearings ensure vibration-free operation. Proudly made in Canada by Atmosphere. The Vortex Powerfan comes with a 6' power cord, ready to plug in, installed by the manufacturer. These blowers feature a 10 year warranty.

VORTEX POWERFANS V-SERIES

by ATMOSPHERE

Power cord kit included

Item No.	Description	CFM	MSRP
736690	12" Vortex Inline Fan (V-12XL)	2050	$864.95
736691	14" Vortex Inline Fan (V-14XL)	2905	$1,399.95
736695	16" Vortex Inline Fan (V-16XL)	4515	$2,289.95

The Vortex V-Series fans combine high performance and quiet operation. This fan is powered by a permanently lubricated and balanced external rotor motor equipped with a mixed-flow impeller. This impeller is a cross between vane axial and centrifugal design allowing more air volume than any other comparable design. The heavy duty galvanized steel and Hammertone epoxy baked finish contributes to the sound dampening and superior rust prevention. Furthermore the V-Series fans operate at lower RPM making them even quieter. It comes with a 3 year factor warranty and are 100% speed controllable.

VORTEX REPLACEMENT MOUNTING BRACKETS

NEW! by ATMOSPHERE

Item No.	Description	MSRP
736706	4" Vortex Mounting Bracket	$11.50
736704	6", 8" & 10" Vortex Mounting Bracket	$14.95
736701	12" Vortex Mounting Bracket	$16.95

Made from galvanized steel, the mounting brackets are available for all sizes of Vortex Powerfans. They are made to be mounted in all positions either horizontally or vertically. They come in a 3 piece set, except for vtx400, vtx500 and vtx600L models which only need 2 pieces for mounting. The necessary screws are also included.

ELICENT INLINE FANS

Item No.	Description	CFM	MSRP
736760	4" Elicent Inline Fan	152	$179.95
736763	6" Elicent Inline Fan	309	$231.95
736765	8" Elicent Inline Fan	636	$297.95
736767	10" Elicent Inline Fan	695	$339.95
736770	12" Elicent Inline Fan	1198	$473.95

- Suitable for domestic, commercial or industrial applications.
- High performances and pressure to overcome the resistance caused by long length ducting.
- Heavy-gauge, spun steel housing with baked epoxy finish inside and outside
- External junction box contains connections.
- Backward curved blades to ensure the lowest possible sound and to develop ample static pressure.
- Durable external rotor motor provided with thermal reset overload protection.
- Ball bearing motor, permanently lubricated for maintenance-free operation and continuous running.
- Fan and motor assembly balanced for quiet and vibration-free operation
- Variable speed controllable.

FANTECH INLINE MIXED FLOW DUCT FANS FKD SERIES

Item No.	Description	CFM	MSRP
736290	10" Fantech Centrifugal Fan (FKD10XL)	1266	$707.95
736120	12" Fantech Centrifugal Fan (FKD12XL)*	2016	$894.95

*Note: XL model has 12 3/8" diameter intake

These fans are specifically designed to bridge the transition between centrifugal and axial by combining the high flow of axial designs with the higher pressure, non-overloading characteristics of backward curved impellers. Galvanized steel housing as above with baked powder coat finish. External motor with built-in thermal overload protection and automatic reset. Permanently sealed ball bearings. External wiring box for ease of connection. 100% speed controllable. Mixed flow impeller. Suitable for air stream temperatures up to 140° F. Excellent heat dissipation to ensure long motor life. Tested and approved by UL and CSA. 3 Year Factory Warranty. Power cord and strain relief included, but not wired in.

FANTECH INLINE CENTRIFUGAL FANS FG SERIES

Item No.	Description	CFM	MSRP
736400	6" Fantech Centrifugal Inline Fan (FG6)	256	$201.95
736405	6" Fantech Centrifugal Inline Fan (FG6XL)	392	$273.95
736410	8" Fantech Centrifugal Inline Fan (FG8)	481	$281.95
736415	8" Fantech Centrifugal Inline Fan (FG8XL)	521	$332.95

German made, top quality motor. Same fans as FX series but offer a galvanized silver housing instead of the blue color of the FX fans. Powered by external rotor motorized impeller for excellent heat dissipation. Automatic reset thermal overload protection. Permanently sealed ball bearings. External wiring box for ease of connection. FG Series fans are suitable for airstream temperatures up to 140° F. 100% speed controllable. 5 Year Factory Warranty. Power cord and strain relief included, but not wired in.

BUG SCREENS

Item No.	Description	Size	MSRP
704215	Bug Screen	4"	$9.95
704220	Bug Screen	6"	$11.95
704225	Bug Screen	8"	$13.29
704230	Bug Screen	10"	$14.95
704235	Bug Screen	12"	$16.95

NEW!

- Active carbon inserts proven to catch all bugs, mold and mildew.
- Minimal air flow restriction.
- Easily slips on and off inline fans.
- Mildew and UV resistant.
- Custom fit 4, 6, 8, 10 and 12 inch sizes.

AIR KING® FANS

Item No.	Description	MSRP
736735	6" - 2 speed circulating clip on fan	$24.95
736725	12" - 3 speed wall mount oscillating fan	$62.95
736730	16" - 3 speed wall mount oscillating fan	$65.95
736740	18" - 3 speed wall mount oscillating fan	$89.95

The 6 inch clip on fan has impact resistant plastic grills with chemical resistant polypropylene blade, 2-speed and 1/300 HP motor. One year warranty.

The 12 inch Wall Mount fan has a powder coated steel front grill with impact resistant plastic rear grill and chemical resistant polypropylene blade, 3-speeds and a 1/50 HP motor. It oscillates 90° or can be locked in non-oscillating position. One year warranty.

The 16 inch Wall Mount fan has a powder coated steel front grill with impact resistant plastic rear grill and chemical resistant polypropylene blade, 3-speeds and a 1/20 HP motor. It oscillates 90° or can be locked in non-oscillating position. One year warranty.

The 18 inch Wall Mount fan has a powder coated steel front grill with impact resistant plastic rear grill and chemical resistant polypropylene blade, 3-speeds and a 1/20 HP motor. It oscillates 90° or can be locked in non-oscillating position. One year warranty.

AIR KING® PEDESTAL FANS

Item No.	Description	MSRP
736731	Air King® 16" Pedestal Fan	$64.95
736741	Air King® 18" Pedestal Fan	$67.95

The 16" Oscillating Pedestal Fan features a 3-speed 1/20 HP motor with rear mounted rotary controls and a 7' white power cord. The grills are constructed of a powder coated steel front grill with an impact resistant plastic rear grill. Fan height is adjustable from 36" to 52". Dimensions: 18" L x 18" W x 52" Weight: 11.30 lbs.

The 18" Oscillating Pedestal Fan features a 3-speed 1/20 HP motor with rear mounted rotary controls and a 7' white power cord. The grills are constructed of a powder coated steel front grill with an impact resistant plastic rear grill. Fan height is adjustable from 37" to 53.75". Dimensions: 20.25" L x 20.25" W x 53.75" Weight: 13.80 lbs.

ECOPLUS® OSCILLATING FANS

Item No.	Description	MSRP
736505	EcoPlus® 16" - Wall Mount Fan	$36.95
736506	EcoPlus® 18" - Wall Mount Fan	$57.95
736507	EcoPlus® 16" - Stand Fan	$47.95
736528	EcoPlus® Wall Mount Fan Bracket - Replacement	$2.49

These excellent quality wall mount fans features 3 speeds with a speed control knob and cord. They can oscillate 90° or be locked in place. The fan head can also be rotated up and down for more directional control. Both are very quiet and efficient. One year warranty.

The stand fan has 3-speed controls and a powder coated steel grill. The blade is chemical resistant polypropylene. 90º oscillation or can be locked in non-oscillating position. Fan height is adjustable from 41" to 55". One year warranty.

DAYTON® AXIAL FANS

INCLUDES POWER CORD

Item No.	Description	Amps	Watts	CFM	MSRP
736901	Dayton® 4" Axial Fan	.18	18	105	$35.95
736906	Dayton® 6" Axial Fan	.23	27	239	$73.95
736911	Dayton® 10" Axial Fan	.23	26	665	$97.95
736913	Replacement 6' Power Cord For Axial Fan				$5.95

4" Axial Fan, 105 CFM, 115 Volt
Square AC Axial Fan, Air Flow 105 CFM, Voltage Rating 115 Volts, Width 4 11/16 Inches, Speed 2900 RPM, Current Rating 0.18 Amp, Bearing Sleeve, Power Rating 18 Watts, Speech Interference Level 48 dB, Cast Aluminum Housing, Maximum Temperature 158 Degrees Fahrenheit.

6" Axial Fan, 238 CFM, 115 Volt
Round AC Axial Fan, Air Flow 239 CFM, Voltage Rating 115 Volts, Width 5 7/8 Inches, Speed 3200 RPM, Current Rating 0.23 Amp, Bearing Ball, Power Rating 27 Watts, Speech Interference Level 55 dB, Cast Aluminum Housing, Maximum Temperature 176 Degrees Fahrenheit.

10" Axial Fan, 665 CFM, 115 Volt
Round AC Axial Fan, Air Flow 665 CFM, Voltage Rating 115 Volts, Speed 1600 RPM, Current Rating 0.23 Amp, Bearing Ball, Power Rating 26 Watts, Speech Interference Level 52 dB, Cast Aluminum Housing, Maximum Temperature 176 Degrees Fahrenheit. All models include detachable power cord.

ECOPLUS® AXIAL FANS

INCLUDES POWER CORD

Item No.	Description	Amps	Watts	CFM	MSRP
736875	EcoPlus® 3.25" Axial Fan	.07	5	25	$30.95
736880	EcoPlus® 4.5" Axial Fan	.23	24	112	$30.95
736885	EcoPlus® 6" Axial Fan	.25	28	235	$63.95
736890	EcoPlus® 8" Axial Fan	1.0	102	647	$95.95
736895	EcoPlus® 10" Axial Fan	.62	67	806	$95.95
736913	Replacement 6' Power Cord For Axial Fan				$5.95

These excellent quality axial fans can be used in any application where ventilation/air movement is required. They are very reliable and will provide years of trouble-free use. Includes detachable power cord. 1 year warranty.

ECOPLUS® BLOWERS

Item No.	Description	CFM	MSRP
736620	EcoPlus® Blower	180	$95.95
736625	EcoPlus® Blower	265	$102.95
736630	EcoPlus® Blower	465	$113.95

- Attractive gray powder coated steel housing.
- Intake flange adapters built right into fan, no need to purchase hose adapters separately.
- Quiet, powerful and dependable - industrial grade quality.
- 10 foot grounded power cord pre wired into each unit.
- Excellent way to control temperature and humidity in any growing area.
- 1 year warranty.

DAYTON BLOWERS®

Item No.	Description	MSRP
736005	Dayton Blower - 131 cfm	$103.29
736010	Dayton Blower - 273 cfm	$124.95
736015	Dayton Blower - 463 cfm	$144.95

These blowers offer heavy duty steel housings that are powder coated to withstand moist environments. All models include an easy to install power cord and strain relief. New updated models, same great Dayton quality. One year warranty.

ECOPLUS® BLOWER ADAPTORS

These adaptors are very heavy duty and made for years of use. They are all made of heavy gauge galvanized steel. All exhaust adaptors offer a 90° flange for easy mounting. New individual retail packaging. Designed to work with the EcoPlus® & Dayton Blowers.

Code#	Description	Fitting Size	Works with EcoPlus® Blower No.	Works with Dayton Blower No.	MSRP
736225	131 cfm INTAKE	4"	N/A - built in	736005	$9.95
736230	131 & 180 cfm EXHAUST	4"	736620	736005	$11.95
736235	273 & 463 cfm INTAKE	6"	N/A - built in	736010 & 736015	$10.95
736240	273 cfm EXHAUST	4"	736625	736010	$13.95
736241	273 cfm INTAKE or EXHAUST (no mounting bracket)	4"	N/A	736010	$11.95
736250	463 cfm EXHAUST	4" x 2"	736630	736015	$20.95
736251	463 cfm EXHAUST	6"	736630	736015	$20.95

Item No.	Description	MSRP
702695	Titan Controls® Mercury 1™ Adjustable Fan Speed Controller	$23.95

TITAN CONTROLS® MERCURY 1™

NEW!

The Mercury 1 is fully adjustable for precise control of your fan, pump or small motor. This lets you 'tune' your room for the perfect environment. The Mercury 1's durable and space saving design allows it to be used in tight spaces. The on board LED indicates that the controller is functioning properly.

- Adjustable from 15% to 100%.
- Circuit breaker protected for your safety.
- Easy to use and simple to install.
- Plastic enclosure resists dust and moisture.
- Only the highest quality components are used.
- Runs fans, pumps and small motors.
- 10 Amps/120 Volts/60 Hz.
- 3 year warranty.

TITAN CONTROLS® MERCURY 3™

NEW!

- Automatically increases or decreases fan speed based on controller set points.
- Allows user to adjust deadband range to meet garden requirements.
- Temperature control range is 55° F to 95° F.
- 6 foot temperature probe is accurate to within 2 °F.
- Plastic enclosure protects internal components from dust and moisture.
- 6 Amps/120 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
702755	Titan Controls® Mercury 3™ - Day/Night Fan Speed Controller	$119.95

TITAN CONTROLS® MERCURY 4™

NEW!

- Allows user to select minimum fan idle speed between 25% & 60% of fan rating.
- Enables the user to activate/deactivate 'low temperature' safety feature.
- Temperature control range is 55° F to 95° F.
- 6 foot temperature probe is accurate to within 2° F.
- Plastic enclosure protects internal components from dust and moisture.
- 6 Amps/120 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
702760	Titan Controls® Mercury 4™ - Multi-Function Fan Speed Controller	$119.95

TITAN CONTROLS® ZEPHYR 1™

NEW!

- Temperature control range is 55° F to 95° F.
- Controls cooling or heating equipment.
- Day and night settings keep temperature within 4° F of set point.
- 6 foot temperature probe is accurate to within 2° F.
- Plastic enclosure protects internal components from dust and moisture.
- 15 Amps/120 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
702630	Titan Controls® Zephyr 1™ - Day/Night Temperature Controller	$89.95

THE SPEEDSTER™ - VARIABLE FAN SPEED CONTROL

The Speedster™ is great multi purpose speed control. Three settings include off, on (full) and variable. Simple use the dial to increase or decrease fan motor speed. 120 volt/15 amps. 90 day warranty.

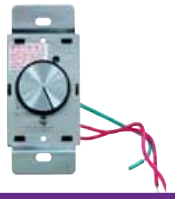
Item No.	Description	MSRP
736617	The Speedster™	$27.95

EL 500 FAN CONTROL

Easy to use - plug fan into control receptacle, then plug control into 120 volt power supply. Set thermostat to a temperature you want the fan to come on at and that's it!

Item No.	Description	MSRP
736167	EL500 - Cooling Thermostat	$79.95

SPEED CONTROL



Rotary type variable speed controller with on/off switch. Brushed aluminum switch plate and screws included. Fits standard single gang box. 5 amp.

Item No.	Description	MSRP
736615	Speed control	$24.95

Item No.	Description	MSRP
736618	Dial-a-Temp	$27.95

DIAL-A-TEMP

The Dial-a-Temp is a plug-In style speed control specifically designed for controlling fans or blowers. It operates from 115 VAC 50/60 Hz with a maximum rating of 300 Watts (2.5 amps) @ 25º C/77º F. The Dial-a-Temp contains an On/Off line switch with variable speed control from low to high. No internal wiring, just plug in and use. One year warranty.

"Y" Duct Fittings and Reducers

These fittings are now made from a heavier gauge galvanized steel. They are thicker and more heavy duty than competitive fittings on the market. We offer a variety of sizes for all your ventilation and cooling needs. Cases are packaged in corrugated boxes to protect them & for easy handling.

"Y" CONNECTIONS

Item No.	Description	MSRP
736185	4" x 4" x 4" "Y" Connector	$18.29
736189	6" x 4" x 4" "Y" Connector	$18.29
736190	6" x 6" x 6" "Y" Connector	$19.95
736195	8" x 6" x 6" "Y" Connector	$19.95
736200	8" x 8" x 8" "Y" Connector	$21.95
736205	10" x 8" x 8" "Y" Connector	$22.95
736217	12" x 10" x 10" "Y" Connector	$33.29
736216	12" x 12" x 12" "Y" Connector	$33.29

DUCT REDUCERS

Item No.	Description	MSRP
736210	Reducer 6" to 4"	$12.49
736211	Reducer 8" to 6"	$13.29
736212	Reducer 10" to 8"	$14.95
736213	Reducer 12" to 10"	$16.29
736214	Reducer 14" to 12"	$21.59

2000 SR DUCTING

The 2000 SR Series Ducting is specifically engineered to handle unconditioned air. The 2000 SR Series can withstand high heat, high humidity and excessive CFM's without any duct failure or fatigue. 2000 SR features a triple laminate with industrial grade foil casing for durability, and an ultra-smooth double sealed core for frictionless and silent air flow. The "Carbon Black" inner core does not reflect light. "Rip-stop" prevents tearing, galvanized spring steel maintains duct shape and prevents rust. The SR series is c-ETL-us certification tested and verified to conform to UL181 standards. Made in Canada! North America's best quality product. It's engineered for what you need.

Item No.	Description	MSRP
736915	4" x 25' SR Ducting	$28.95
736920	6" x 25' SR Ducting	$40.95
736925	8" x 25' SR Ducting	$51.95
736930	10" x 25' SR Ducting	$65.95
736935	12" x 25' SR Ducting	$81.95
736940	14" x 25' SR Ducting	$100.95

SR INSULATED DUCTING

ThermoFlo Technologies 'SRB' series is an industrial quality insulated duct manufactured "tough" for consumers' and installers' peace of mind. It consists of a three ply polyester laminate, fiberglass reinforced scrim, galvanized spring steel wire, wrapped with fiberglass insulation, which provides an outstanding combination of strength and tear resistance. A heavy duty fire retardant black polyethylene vapor barrier adds extra durability. The insulation reduces noise, heat loss and condensation.

Item No.	Description	MSRP
736950	4" x 25' SR Insulated Ducting	$50.95
736955	6" x 25' SR Insulated Ducting	$70.95
736960	8" x 25' SR Insulated Ducting	$91.95
736965	10" x 25' SR Insulated Ducting	$111.95
736970	12" x 25' SR Insulated Ducting	$133.95

DUCTING WITH CLAMPS

Ideal for air cooling all Sun System® hoods. Also can be used in various heating, ventilating or exhausting applications. These Class 1 aluminum flexible air duct connectors are made from tough, puncture resistant 3 ply aluminum foil laminate and contain a high density, corrosion resistant wire helix in the duct wall for support. Includes 2 stainless steel hose clamps in every box.

Item No.	Description	MSRP
904165	4" x 25' ducting with clamps	$16.95
904170	6" x 25' ducting with clamps	$22.95
904175	8" x 25' ducting with clamps	$29.95
904180	10" x 25' ducting with clamps	$35.95
904185	12" x 25' ducting with clamps	$43.95

ECOPLUS® FLANGE KITS

These flange kits are used to vent air through a wall or ceiling. Mount the flange kit to the wall or ceiling, then attach your duct work to the flange. Also for use with Sun Huts.

Item No.	Description	MSRP
736355	EcoPlus® 4" Flange Kit	$8.95
736356	EcoPlus® 6" to 4" Reducer Flange Kit	$8.95
736357	EcoPlus® 6" Flange Kit	$9.95
736359	EcoPlus® 8" Flange Kit	$10.95

HOSE CLAMPS

These stainless steel hose clamps are perfect for attaching duct to Sun System® reflectors. They are simple to use and make for a clean and attractive duct connection.

Item No.	Description	MSRP
380030	4" Hose Clamp	$1.60
380050	6" Hose Clamp	$1.90
380060	8" Hose Clamp	$4.00
380070	10" Hose Clamp	$4.40
380080	12" Hose Clamp	$6.00

NOISE REDUCTION CLAMPS – NEOPRENE LINED

These clamps are used with fans, carbon filters and ducting. The neoprene lining makes for a tight, vibration free fit. Also use to clamp two Sun Tube's together.

Item No.	Description	MSRP
380092	Noise Reduction Clamp 4"	$9.29
380094	Noise Reduction Clamp 6"	$10.95
380096	Noise Reduction Clamp 8"	$11.95
380097	Noise Reduction Clamp 10"	$14.49
380098	Noise Reduction Clamp 12"	$17.29

HVAC ZIP TIES

Item No.	Description	MSRP
380100	36" HVAC Zip Tie - 50/pack	$13.95/pk
380105	48" HVAC Zip Tie - 50/pack	$27.95/pk

No more dealing with hose clamps! These commercial-grade HVAC zip ties are very simple to use and feature a locking mechanism that gives ducting a firm hold. Made from thick, heavy duty natural colored nylon. The 36" tie can fit up to 10" ducting and the 48" tie can fit up to 14" ducting. These zip ties will work great for all your fastening needs.

- Attach flexible ducting to reflectors, fans, carbon filters and more.
- Use to safely secure products to your wall or ceiling.
- They also work great to hold pre-filters tightly on your carbon filter.

RESCUE TAPE

NEW!

- Rescue Tape is the ultimate multi-purpose self-fusing repair tape.
- Incredible 950 PSI tensile strength.
- Insulates 8,000 volts per layer.
- Withstands 500° F degrees of heat.
- Remains flexible to - 85° F (-60° C).
- Creates a permanent air-tight, Water-tight seal in seconds.
- Never gets gummy or sticky.

Item No.	Description	MSRP
380110	Rescue Tape 1" x 12' Black	$10.50
380115	Rescue Tape 1" x 12' Clear	$10.50

SILVER FLEX DUCT TAPE

A 2 mil, heavy duty, high strength aluminum foil coated with a specially formulated pressure sensitive acrylic adhesive system. Will not leave behind messy adhesive residue. Use it to make your ducting to fixture connections air tight. Also used to seal any air gaps in reflectors. UL listed.

Item No.	Description	MSRP
904161	Silver Flex Duct Tape - 5 yards	$2.49
904162	Silver Flex Duct Tape - 120 yards	$17.95

IDEAL-AIR COMMERCIAL PORTABLE AIR CONDITIONER - 12,000 BTU

NEW!

- Cooling capacity: 12,000 BTU/hour.
- Power Supply: Single 6 foot 120 Volt cord.
- 11.5 amps.
- Size: 17.5" W x 19.9" D x 43.3" H.
- Weight: 132 lbs.
- Nema Plug: 5-20P.
- Refrigerant Type: R410A.
- Operating conditions is 64° - 113° F.
- The hot air ducts diameter is 12".
- Maximum duct length is 16".
- Condensate tank is 3.17 gallons.

Shown with optional Outside Air Intake on back of unit.

Item No.	Description	MSRP
700870	Air Conditioner Commercial - 12,000 BTU	$2,395.95
700872	Air Conditioner Exhaust Adaptor 12,000 BTU	$179.95
700874	Air Conditioner Outside Air Intake 12,000 BTU	$219.95

IDEAL-AIR COMMERCIAL PORTABLE AIR CONDITIONER - 21,000 BTU

NEW!

- Cooling capacity: 21,000 BTU/hour.
- Power Supply: Single 6 foot 240 Volt cord.
- 11 amps.
- Size: 22" W x 24.4" D x 50.4" H.
- Weight: 198 lbs.
- Nema Plug: 6-15P.
- Refrigerant Type: R410A.
- Operating conditions is 64° - 113° F.
- The hot air ducts diameter is 16".
- Maximum duct length is 25".
- Condensate tank is 3.17 gallons.

Shown with optional exhaust adapter.

Item No.	Description	MSRP
700875	Air Conditioner Commercial - 21,000 BTU	$2,999.95
700876	Air Conditioner Exhaust Adaptor 21,000 BTU	$189.95
700878	Air Conditioner Outside Air Intake 21,000 BTU	$229.95

REMOTE TEMPERATURE SENSOR FOR COMMERCIAL AIR CONDITIONERS

Item No.	Description	MSRP
700880	Remote Temperature Sensor for Commercial Air Conditioners	$59.95

NEW!

The optional remote temperature sensor allows the user to place the air conditioner outside of the area being cooled by plugging in the sensor and placing the probe in the area being cooled. Just run round duct work to the areas needing cooling and turn the unit on. The remote sensor will read the temperature in the area being cooled and turn the air conditioner off and on to maintain the temperature set by you with the digital control board on the unit.

HUMIDIFIER - COMMERCIAL GRADE

Item No.	Description	MSRP
700860	Humidifier - Commercial Grade	$299.95

NEW!

This excellent quality humidifier features a multi-directional fogging head. Measures 12.2" tall x 12.2" in diameter. Coverage is from 160-320 sq ft, depending on humidification requirements and ceiling height. Maximum output is 0.4 gallons per hour. Industrial-grade motor for years of use. Connects directly to your water supply with your own hookup (uses 1/4" tubing). Operates at 62 dBA. 110 volts/60 hz/.9 amps. 1 year manufacturer's warranty.

Consider using a Titan Controls® Eos 1™ with this product!

CONDENSATE PUMPS

Item No.	Description	MSRP
728130	Condensate Pump - 120 Volt	$74.95
728135	Condensate Pump - 240 Volt	$87.95

NEW!

These pumps are used as an accessory with air conditioners and dehumidifiers. Each pump comes with 20 foot 3/8" tube.

Condensate Pump is suitable for use with condensate from high efficiency condensing furnaces and boilers which produce acidic condensate. This rugged pump has 22 feet of lift, compared to the typical 20 feet. These pumps have a number of features and benefits including vibration dampening feet and motor mounts, metal hang tabs, four versatile inlet holes, an easy to understand indicator display, a simple float switch and check valve, and a pan pill dispenser.

Integrating these pumps into your system is easy. 1/4" inch quick connect terminals provide easy connection to the built in overflow switch. Three terminals are provided allowing the installer flexibility to connect air-handler shut-down and optional alarm as needed. Switch features SPDT isolated contacts ready for connection to building automation systems. • Continuous duty 140 F°. •Maximum inlet temperature 160 F°.

AIR CONDITIONER

Item No.	Description	MSRP
700850	Air Conditioner - 12,000 BTU	$589.95

This portable air conditioner is perfect to keep your grow room cool. It is a very reliable and efficient unit.

- Cooling capacity: 12,000 BTU/hour.
- Dehumidifying capacity: 24 liters/day.
- Power: 1,200 watts cooling, 950 watts dehumidifying.
- 120 volt/60 Hz.
- Built-in water reservoir. Can also be setup for continuous drainage.
- Programmable timer with 3 speeds.
- Includes remote control.
- Cool air is distributed through the top oscillating vents.
- 2 extendable ducts. One is intake and the other is exhaust.
- Does not work with environmental controllers.
- Weighs 90 lbs.
- 1 year warranty.

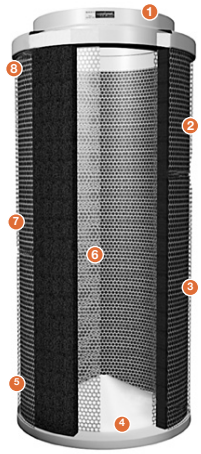
ALL PHRESH FILTERS COME WITH A PRE-FILTER AND A FLANGE.

THE PHRESH® DIFFERENCE

- Half the weight
- Last twice as long
- Moves higher CFM's
- Priced similar to competitive filters
- Largest selection of sizes
- RC48 granular vs. pelletized carbon

Phresh® Filter RC48 Australian Granular Carbon

Competitive Pelletized Carbon

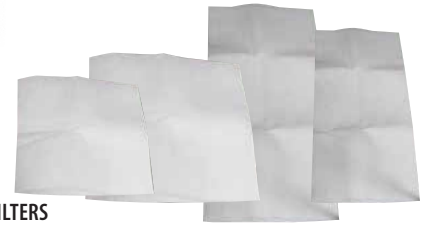


Visit www.phreshfilter.net for more information & to use our exclusive filter size calculator. Visit YouTube & search "Phresh Filter" to see what makes Phresh the best filter in the industry.

PHRESH® FILTERS

1) Aluminum tops and bases for reduced weight. Half the weight of competitive filters.
2) 46mm (1.8") RC-48 activated, certified virgin carbon bed.
3) Machine packed carbon means more carbon and less movement.
4) Cone shaped internal base for optimum air flow.
5) Sealed, bagged, boxed and labeled directly after being manufactured for optimum life span, handling and presentation.
6) 51% open air custom mesh.
7) Unique "Anti Air Bypass" System.
8) Large selection of sizes available to fit any application.
9) Flange & prefilter included.

Item No.	Description	CFM	MSRP
701000	Phresh® Filter 4" x 8"	150	$97.95
701003	Phresh® Filter 4" x 12"	200	$104.95
701005	Phresh® Filter 6" x 16"	400	$161.95
701010	Phresh® Filter 6" x 24"	550	$181.95
701015	Phresh® Filter 8" x 24"	750	$194.95
701018	Phresh® Filter 8" x 39"	950	$254.95
701020	Phresh® Filter 10" x 24"	850	$211.95
701025	Phresh® Filter 10" x 39"	1400	$282.95
701030	Phresh® Filter 12" x 39"	1700	$342.95
701035	Phresh® Filter 14" x 39"	2100	$377.95
701040	Phresh® Filter 14" x 48"	2500	$406.95
701045	Phresh® Filter 14" x 50" **XL** NEW!	3800	$489.95



PHRESH® REPLACEMENT PRE-FILTERS

Item No.	Description	MSRP
701060	Phresh® Replacement Pre-Filter 4" x 8"	$4.95
701065	Phresh® Replacement Pre-Filter 4" x 12"	$6.29
701070	Phresh® Replacement Pre-Filter 6" x 16"	$9.95
701075	Phresh® Replacement Pre-Filter 6" x 24"	$11.29
701080	Phresh® Replacement Pre-Filter 8" x 24"	$14.95
701085	Phresh® Replacement Pre-Filter 8" x 39"	$16.29
701090	Phresh® Replacement Pre-Filter 10" x 24"	$17.95
701095	Phresh® Replacement Pre-Filter 10" x 39"	$19.95
701100	Phresh® Replacement Pre-Filter 12" x 39"	$21.29
701105	Phresh® Replacement Pre-Filter 14" x 39"	$22.95
701110	Phresh® Replacement Pre-Filter 14" x 48"	$24.95

NEW!

PHRESH® FILTER REPLACEMENT BANDS

Easy to use elastic replacement bands for Phresh Pre-Filters. Simply stretch over the top of the filter for installation.

Item No.	Description	MSRP
701120	Phresh® Replacement 4" x 8" Band - pair	$1.99
701125	Phresh® Replacement 4" x 12" Band - pair	$1.99
701130	Phresh® Replacement 6" x 16" Band - pair	$2.49
701135	Phresh® Replacement 6" x 24" Band - pair	$2.49
701140	Phresh® Replacement 8" x 24" Band - pair	$2.99
701145	Phresh® Replacement 8" x 39" Band - pair	$2.99
701150	Phresh® Replacement 10" x 24" Band - pair	$3.49
701155	Phresh® Replacement 10" x 39" Band - pair	$3.49
701160	Phresh® Replacement 12" x 39" Band - pair	$3.99
701165	Phresh® Replacement 14" x 39" Band - pair	$4.49
701170	Phresh® Replacement 14" x 48" Band - pair	$4.49

NEW!

DUCT SILENCERS

PHRESH® DUCT SILENCERS

- Sound reducing acoustic foam decreases fan noise by up to 50%.
- Attach to inline fans used with Phresh Carbon Filters, cooling light systems and more.
- Durable and light weight aluminum body.
- Compact size is easy to install.
- Attach a Phresh Silencer to the intake or exhaust side of an inline fan. Use on both sides for maximum sound reduction.

Item No.	Description	MSRP
701200	Phresh® Duct Silencer 4" x 12"	$59.95
701205	Phresh® Duct Silencer 6" x 18"	$92.95
701210	Phresh® Duct Silencer 8" x 24"	$107.95
701215	Phresh® Duct Silencer 10" x 30"	$147.95
701220	Phresh® Duct Silencer 12" x 36"	$181.95
701225	Phresh® Duct Silencer 14" x 39"	$219.95

CARBONAIRE FILTERS

These filters offer an economical and extremely effective way to remove unwanted organic and chemical odors. Carbonaire uses highly activated virgin carbon to assure maximum odor filtration. These filters are easy to use and under typical conditions will last at least a year. Each unit includes a pre-filter that collects dust and other airborne particles from clogging the carbon. Carbonaire filters are available in four convenient sizes; 4", 6", 8" and 12".

FEATURES:

- Highly activated virgin carbon, for long lasting odor absorption.
- Pre-filter that collects dust and other airborne particles.
- Individually boxed and wrapped to keep the carbon fresh.
- Nice retail packaging includes black box and new Carbonaire labeling.
- Constructed with heavy-duty galvanized steel.
- **Flange included.**

Carbonaire CARBON FILTER

ECOPLUS®

Code#	Description	Flange	Max CFM	Pre-Filter	Room Size	Carbon Weight	Height	Outside Dia	Recommended Fan	Air Exchange/Hour	MSRP
700150	Carbonaire Filter 4"	4"	200	Yes	8' x 8' x 8'	16 lbs	14"	12"	EcoPlus® 4" Inline	20	$106.95
700155	Carbonaire Filter 6"	6"	500	Yes	12' x 12' x 8'	40 lbs	22"	15.75"	EcoPlus® 6" Inline	23	$157.95
700160	Carbonaire Filter 8"	8"	850	Yes	18' x 18' x 8'	78 lbs	42"	15.75"	EcoPlus® 8" Inline	17	$237.95
700165	Carbonaire Filter 12"	12"	1300	Yes	25' x 25' x 8'	118 lbs	62"	15.75"	EcoPlus® 12" Inline	10	$301.95

CARBONAIRE REPLACEMENT FLANGES

Item No.	Description	MSRP
700151	4" Replacement Flange	$14.95
700156	6" Replacement Flange	$15.95
700161	8" Replacement Flange	$19.95
700166	12" Replacement Flange	$23.95

CARBONAIRE REPLACEMENT PRE-FILTERS

Item No.	Description	MSRP
700152	4" Replacement Pre Filter	$7.95
700157	6" Replacement Pre Filter	$11.95
700162	8" Replacement Pre Filter	$15.95
700167	12" Replacement Pre Filter	$19.95

REPLACEMENT CARBON

Use to refill any carbon filter. This is high quality virgin activated coconut carbon. It comes bulk in a box and inside a plastic bag.

Item No.	Description	Size	MSRP
700070	Replacement Pelletized Carbon	16 lbs	$71.95
700080	Replacement Pelletized Carbon	35 lbs	$127.95

ODOR-SOK AIR FILTERS

ODORSOK AIR FILTER

- Extremely cost effective.
- Lightweight, durable construction.
- Suitable up to 99% humidity.
- Machine washable.
- Easy to dispose - compresses to almost nothing.

Odor-Sok Air Filters are constructed using bundles of microscopic activated carbon filaments and fibers. By controlling fiber width to 20 nm, the adsorption rate of carbon cloth is similar to that of a single exposed carbon particle. Air flows evenly across the carbon and with accelerated absorption and increased surface area, Odor-Sok Air Filters retain all the properties of traditional canister filters. Faster adsorption rates means smaller filter equipment and up to thirty times less carbon in use for the same result over a one year period.

Item No.	Description	Flow Rate CFM	MSRP
700800	Odor-Sok 4" x 12"	190	$37.95
700805	Odor-Sok 6" x 16"	380	$61.95

ORGANIC AIR GREENHOUSE HEPA FILTERS

Super tight, synthetic HEPA weave uniquely formed for maximum air flow by using opposing dual cone technology. HEPA fiber doesn't allow penetration of most things besides air. Reduces over 90% of all molds, bacteria and 99% of all insects entering your grow room through your intake fan. Attach directly to your fan.

Item No.	Description	MSRP
700900	Organic Air HEPA Filter 4"	$89.99
700905	Organic Air HEPA Filter 6"	$124.99
700910	Organic Air HEPA Filter 8"	$159.99

ORGANIC AIR CHARCOAL FIBER FILTER

"The Fresh Maker" is a triple layer, high capacity, single pass charcoal filter. These filters are efficient, durable and light-weight. They feature an inverted hose cone & vertical pleats for maximum filtered surface area. Attach directly to your fan.

Item No.	Description	Max CFM	MSRP
700925	Organic Air Charcoal Fiber Filter 4"	516	$88.95
700930	Organic Air Charcoal Fiber Filter 6"	942	$125.95
700935	Organic Air Charcoal Fiber Filter 8"	2000	$189.95

TIMEMIST® PLUS METERED DISPENSER

- Programming features: Time of day, start/stop times Light (30 Mins), Medium (15 Mins), Heavy (7.5 Mins) spray settings.
- Other features: LED service reminder, audio service reminder, LED battery replacement reminder, lifetime quality guarantee, utilizes 2 "C" cell batteries (not included).
- For use with TimeMist® and Clean Air Purge metered aerosols.

Sophistication and intelligence in a programmable dispenser. The TimeMist® Plus utilizes cutting-edge electronics to offer simple and complete programmability. It allows you to control fragrance intensity using spray settings (Light, Medium and Heavy) that fit your odor control needs. Saves time, reduces labor and lowers costs.

Item No.	Description	MSRP
700270	TimeMist® Plus Programmable Dispenser	$51.95

FRESH2 ODOR CONTROLLING FLUORESCENT BULB

A special coating of titanium dioxide is what gives fresh^2 the ability to break down odors. When the surface of this coating is exposed to fluorescent light, a photo catalytic action occurs. The reaction emits electrons - negatively charged particles - and simultaneously, positively charged holes form in their place on the glass surface. This creates very strong oxidizers that completely break down odors. Purifying begins to work 10 minutes after the bulb is turned on. Use in standard medium base sockets (i.e. in a standard household lamp).

Item No.	Description	MSRP
901898	Fresh^2 Odor Controlling Bulb	$17.95

ODOR KILLER™ GEL

Odor Killer originated as a natural odor control product for industrial use. In use on the toughest industrial odor environment, it proved its capabilities over and over in the field and in laboratory tests. Now the industrial strength Odor Killer is available for home use. Odor Killer safely eliminates smoke, food, sanitation, and biological odors in even the most confined areas. It is not a masking agent and does not operate in the same way as less efficient counteractants. Odor Killer creates a neutral atmosphere where objectionable odors are removed without any replacement odors.

Item No.	Description	Size	MSRP
700175	Odor Killer™ Gel	Pint	$9.95
700180	Odor Killer™ Gel	Quart	$17.95
700185	Odor Killer™ Gel	Gallon	$39.95

ODOR KILLER™ REFILL

Odor Killer Refill is used to recharge the crystals from the gel formula. When the gel is down to half it original volume, add the refill formula. Try Odor Killer Refill as a spray for that instant odor control. Pour refill directly into a spray bottle and spray into the air.

Item No.	Description	Size	MSRP
700190	Odor Killer™ Refill	Quart	$15.95
700195	Odor Killer™ Refill	Gallon	$39.95

OZIUM® KIT

Includes: 1 TimeMist® dispenser, 1 Ozium® original 6.4 oz. can, and 1 Ozium® Citrus 6.4 oz. can. One complete kit to start sanitizing the air. Ultra concentrated fragrances with odor counteractants that attack and neutralize unpleasant odors. 3000 shots lasts a full 30-days at a 15 minute setting. **EPA registration No. 51838-1-9444.**

Item No.	Description	MSRP
700290	Ozium® Kit	$54.95

OZIUM® METERED AEROSOL AIR SANITIZER

- For institutional, commercial and residential use.
- Cleanses the air through glycolized action. Attacks and reduces airborne bacteria. Effectively sanitizes, deodorizes and leaves a fresh fragrance in the air.

The best way to clean the air. Ozium®, the original air sanitizer, eliminates smoke and unpleasant odors by reducing airborne bacteria. **EPA registration No. 51838-1-9444.**

700275 700285 700287

Item No.	Description	MSRP
700275	Ozium® Air Sanitizer 3000 - Original (use with TimeMist® Dispenser)	$11.29
700285	Ozium® Air Sanitizer 3000 - Fresh Citrus (use w/ TimeMist® Dispenser)	$11.29
700287	Ozium® Air Sanitizer 3000 - Vanilla (use with TimeMist® Dispenser)	$11.29

OZIUM® HAND HELD SPRAYS

700280 700430 700435

Item No.	Description	MSRP
700280	7000 - Original Scent 14.5 oz. Hand Held Spray	$12.95
700430	1500 - Original Scent 3.5 oz. Hand Held Spray	$11.95
700435	1500 - Vanilla Scent 3.5 oz. Hand Held Spray	$11.95

Ozium® actually cleanses the air through glycolized action. Glycolized formula acts directly on odor causing particles in the air. Two convenient hand-held sizes provides instant odor counteractant. Ozium® is an EPA registered air sanitizer. It is distinguished from other products that simply mask odors. Ozium® actually eliminates smoke and unpleasant odors and reduces airborne bacteria. **EPA registration No. 51838-2-9444.**

ONA BLOCK

Item No.	Description	Size	MSRP
700320	Ona–Block-Polar Crystal	6 oz.	$9.95
700325	Ona–Block-Fresh Linen	6 oz.	$9.95

ONA MIST

Item No.	Description	Size	MSRP
700380	Ona–Mist-Polar Crystal	6 oz.	$16.95
700385	Ona–Mist-Fresh Linen	6 oz.	$16.95

ONA GEL - POLAR CRYSTAL

Item No.	Description	Size	MSRP
700330	Ona – Gel - Polar Crystal	Quart	$19.95
700340	Ona – Gel - Polar Crystal (for Breeze)	Gallon	$42.95
700350	Ona – Gel - Polar Crystal (for Odor Stop)	Gallon	$42.95

ONA GEL - FRESH LINEN

Item No.	Description	Size	MSRP
700335	Ona – Gel - Fresh Linen	Quart	$17.95
700345	Ona – Gel - Fresh Linen (for Breeze)	Gallon	$42.95
700355	Ona – Gel - Fresh Linen (for Odor Stop)	Gallon	$42.95
700365	Ona – Gel - Fresh Linen	5 Gallon	$178.95

ONA LIQUID

Item No.	Description	Size	MSRP
700300	Ona Liquid - Polar Crystal	Quart	$17.95
700305	Ona Liquid - Fresh Linen	Quart	$16.95
700310	Ona Liquid - Polar Crystal	Gallon	$39.95
700315	Ona Liquid - Fresh Linen	Gallon	$40.95

Ona is a complex formula using essential technology to destroy a wide spectrum of organic and non-organic odors. It is environmentally safe.

Ona uses the latest technology to create the most efficient distribution and dispersion systems for their products.

ONA PRO GEL

Item No.	Description	Size	MSRP
700400	Ona Pro Gel	Quart	$19.95
700405	Ona Pro Gel (for Breeze)	Gallon	$42.95
700410	Ona Pro Gel (for Odor Stop)	Gallon	$42.95
700415	Ona Pro Gel	5 Gallon	$167.95
700420	Ona Pro Gel (SO)	7.5 Gal	$199.00

ONA PRO is new and exciting! These are products for professionals and are now available for you. The first product in this series is ONA PRO Gel. As Ona constantly strives to improve our Odor Neutralizing products, they have developed a formulation that takes odor control to a new level.

ONA PRO Gel is as close to odorless. Although it has a slight scent when sniffed in the container, the final result when working on powerful, noxious odors is simply a clean, fresh smell - period. It leaves nothing behind to indicate that any odors were present. ONA PRO Gel is the best product to date, and it is all you will ever need.

ONA PRO BLOCK

Do you have a smelly pail? To solve that problem, simply remove the lid from the block and place in the bottom of the pail. The unpleasant odors are gone - quickly and easily. The best part is that the active ingredients in the ONA Blocks are plant based, and therefore safe to use around people, plants and pets.

Item No.	Description	Size	MSRP
700327	Ona Pro–Block	6 oz.	$8.95

ONA PRO MIST

It is virtually odorless and leaves only a fresh smell - like after a summer rain. Like all the ONA Odor Neutralizers, ONA PRO is plant-based and safe to use around people, plants and pets. The ONA Mist aerosol is designed to only spray a short burst into the air. It is so powerful, that's all you need! The virtual scentless properties makes it practical to use ONA PRO Mist anywhere - and people won't realize that you are controlling odors.

Item No.	Description	Size	MSRP
700386	Ona Pro–Mist	6 oz.	$15.95

ONA PRO SPRAY

Item No.	Description	Size	MSRP
700421	Ona Pro–Spray	8 oz.	$9.95

Would you like the air in your home or office to smell fresh and clean? Then use the ONA PRO Spray! It leaves nothing behind to indicate that any odors were present. Nothing! Nada! Zilch! ONA PRO Spray is the best we've ever done, and it is all you will ever need. It is a true odor neutralizer, unlike some store brands that just scent the air.

ONA BLEECH

Item No.	Description	Size	MSRP
700387	Ona Bleech A & B set	8 oz.	$15.95
700388	Ona Bleech A & B set	Quart	$24.95
700389	Ona Bleech A & B set	Gallon	$64.95

ONA Bleech is a potent hydroponics cleaning and decalcification system. It is made in an easy two-step process. Mix equal parts of ONA Bleech and ONA Bleech Activator, wait 15 minutes and then add to water. It is powerful for cleaning but easy on your eyes, nose and skin. It does not give off strong, irritating vapors like regular bleach.

ONA MIST DISPENSER

The ONA Mist Dispenser has an electronic eye that senses bright light or low light. You can set it to only spray in the dark (low light) or during the day (or when lights are normally on). The third option allows you to set it to spray 24 hours per day. The spray is metered out in three adjustable time intervals - 7.5 minutes, 15 minutes, or 30 minutes.

Item No.	Description	MSRP
700390	Ona – Mist Automatic Dispenser*	$21.95

*Unit is proprietary to Ona Mist products.

ONA BREEZE DISPENSER

The ONA Breeze has been redesigned. It is lighter and uses less power, and now fits on either the ONA Gel Pail or ONA Gel Jar (both 4 liters, 1 US Gal). This makes the ONA Breeze excellent value for the dispensation of ONA Gel. The ONA Breeze provides odor neutralization to a room up to 1,500 square feet (15,000 cubic feet) or 166 square meters (500 cubic meters).

Item No.	Description	MSRP
700395	Ona – Breeze Dispenser - 35 cfm fan	$71.95

ONA ODOR STOP DISPENSER

The Odor Stop features a variable speed fan to distribute ONA Gel up to a maximum airflow of 225 cubic feet per minute (CFM). It provides odor neutralization for a room up to 10,000 sq. ft. It is designed for the 4 liter jar ONA Gel container, which will last for 4-6 weeks.

Item No.	Description	MSRP
700397	Ona – Odor Stop Dispenser - 225 cfm fan	$299.95

ONA STORM DISPENSER

NEW!

The ONA Storm is ideal for neutralizing airborne odors in larger facilities such as schools, gymnasiums and office buildings. The ONA Storm, with its adjustable airflow control, evenly distributes ONA for areas up to 10,000 square feet (1,100 square meters). The ONA Storm is specifically designed to be used with ONA Gel 5 gallon size.

The ONA Storm is very practical as it can be set anywhere and has very low power requirements - maxing out at 90 watts.

Item No.	Description	MSRP
700398	Ona – Odor Storm Dispenser	$219.99

ECOPLUS® PRESSURIZED SPRAY BOTTLE

This is a heavy duty, refillable pump sprayer. It features an adjustable brass spray nozzle. Capacity is 64 oz./1.9 Liters. Use to apply most pest/disease control products, foliar sprays or cleaning agents.

Item No.	Description	MSRP
708500	64 oz./1.9 Liter Spray Bottle	$9.95

SOLO DIRECTIONAL SPRAYER

Solo's handheld sprayer is a one-hand pressure sprayer with a telescoping wand that is adjustable from 12" to 23" for comfortable ground level spraying without bending. The high-density polyethylene tank is UV resistant and has a 2 liter capacity. A high efficiency piston pump powers the Solo with Viton® seals for quick pressurization. The high-quality nozzle is fully adjustable from direct jet to fine mist. The locking trigger reduces user fatigue and the Solo is easily filled and cleaned. A built-in shield provides added control if spraying in breezy conditions. This Solo sprayer is perfect for indoor and outdoor spraying.

Item No.	Description	MSRP
708590	Solo Directional Sprayer with Extendable Wand - 2 Liter	$23.75

COMMERCIAL PORTABLE SPRAYER/ATOMIZER

This industrial grade atomizer can spray a wide variety of foliar feed products as well as pest and disease control products. This portable unit is meant to be carried around by the user as the liquid is dispensed. Capacity: 2 gallon • Adjustable Flow: Yes • GPH: 1.5 to 14 • Particle Size: (micron) 22-46 • Range: 13.5 ft. • Flexible Hose: Yes • Shoulder Strap: Yes • Weight: 12.9 lbs. • Voltage: 110 AC

Item No.	Description	MSRP
708540	Commercial Portable Sprayer/Atomizer	$279.95

DUROBLAST™ POWER SPRAYER

This innovative, easy-to-use product replaces traditional trigger sprayers that require manual pumping. Ideal for prolonged spraying applications, the DuroBlast™ significantly reduces finger and hand fatigue experienced with mechanical pump sprayers.

Comes with a rechargeable, battery powered spray nozzle and a 32 oz., wide-mouth bottle for easy refilling. The unit will dispense between 1 - 2 bottles on a single charge. The batteries are nickel-cadmium and designed to last for the life of the sprayer under normal operating conditions.

Item No.	Description	MSRP
708520	DuroBlast™ 32 oz. Power Sprayer	$27.95

½ GALLON FLO-MASTER® PUMP SPRAYER

This small, hand-held Flo-Master® sprayer is ideal for small jobs when a larger pressurized sprayer would not be practical.

- ½ gallon capacity.
- Compact version of standard compressed air sprayers.
- Adjustable poly nozzle which can spray a fine mist; durable poly construction.
- Designed for light jobs; ideal for misting indoor plants.

Item No.	Description	MSRP
708536	½ Gallon Flo-Master® Pump Sprayer	$8.95

3 GALLON FLO-MASTER® BACKPACK SPRAYER

This hefty sprayer holds up to three gallons of water, plant food, insecticide, or weed killer in the translucent plastic tank. The 4" diameter opening allows the tank to fill quickly, while the included fine mesh filter prevents liquids from clogging. A dual head nozzle can also angle forward or backward, offering the maximum amount of coverage for your plants. For more versatility, the red cap in the middle can be placed on one of the nozzle heads for a smaller coverage area. The comfortable gray plastic handle depresses easily, for quick work in watering your plants, terminating weeds, cleaning lawn furniture, or eradicating pesky insects. The included gray strap connects to the top and base of the sprayer and is adjustable on both sides for a comfortable pack. The sturdy pumping arm can be used right- or left-handed simply by moving the straps on the pack. Piston pumping action from the arm allows for continuous spraying. Some assembly required. Three year warranty. Capacity: 3 gallons. Tank Dimensions: 15"W x 4.5"D x 23.5"H. Hose Length: 50"L.

NGW® SPRAY BOTTLE

This 32 oz. spray bottle has an adjustable nozzle and translucent bottle to easily see liquid levels. It can be used for a variety of home and garden applications.

Item No.	Description	MSRP
708502	32 oz. Spray Bottle	$3.49

POWER SPRAYERS

These sprayers feature a motorized, ready-to-use, continuous stream power sprayer which eliminates hand and wrist fatigue. All sprayers have a wide opening for easy filling and graduated measurements for easy mixing. The two gallon model comes with a measuring cup and features a drain plug for easy clean up. The two gallon and one gallon models have an ultra fine misting wand.

Item No.	Description	MSRP
708505	Power Sprayer with 48 oz. Bottle	$5.95
708515	Two Gallon Power Sprayer	$31.95

COMMERCIAL STATIONARY SPRAYER/FOGGER

This industrial grade atomizer can spray a wide variety of foliar feed products as well as pest and disease control products. It is placed in a stationary location and is used to "fog" a greenhouse or confined gardening area. Capacity: 2 gallon • Adjustable Flow: Yes • GPH: 1.5 to 5.3 • Particle Size: (micron) < 50 (20 average) • Range: 100 ft. • Flexible Hose: N/A • Shoulder Strap: N/A • Weight: 10.2 lbs. • Voltage: 110 AC

Item No.	Description	MSRP
708545	Commercial Stationary Sprayer/Fogger	$222.95

5 LITER/1.3 GALLON FLO-MASTER® BATTERY POWERED SPRAYER

No pumping needed. Uses 4 D batteries (included). One set of batteries will spray approximately 18 gallons of liquid. Telescoping wand extends from 16" to 35". Adjustable nozzle with padded shoulder strap.

Item No.	Description	MSRP
708537	5L/1.3 Gallon Flo-Master® Battery Powered Sprayer	$44.95

1 GALLON FLO-MASTER® PUMP SPRAYER

The 1 gallon Flo-Master® pump sprayer is an all-purpose sprayer. It features:

- Funnel top with pour spout.
- Durable poly construction.
- Corrosion resistant poly wand and adjustable nozzle.
- Poly flow control with lock-on feature.

Item No.	Description	MSRP
708538	1 Gallon Flo-Master® Pump Sprayer	$17.95

Item No.	Description	MSRP
708539	3 Gallon Flo-Master® Backpack Sprayer	$63.95

MONDI MIST & SPRAY DELUXE SPRAYER 1.3 QUART

- Superior quality, small capacity tank sprayer designed for use in the garden or home.
- Designed for maximum comfort, efficiency, safety and ease of use.
- High grade plastic construction that provides long life and easy maintenance.
- Brass nozzles adjust spray from fine mist to gently shower. This sprayer features an extra long nozzle and extension.
- Two year warranty.

Item No.	Description	MSRP
708715	Mondi Mist & Spray Deluxe Sprayer - 1.3 Quart/1.2 Liter	$12.49

MONDI MIST & SPRAY DELUXE SPRAYER 2.1 QUART

- Superior quality, small capacity tank sprayer designed for use in the garden or home.
- Designed for maximum comfort, efficiency, safety and ease of use.
- High grade plastic construction that provides long life and easy maintenance.
- Brass nozzles adjust spray from fine mist to gently shower. Features an extended brass head, extra long nozzle and extension.
- Two year warranty.

Item No.	Description	MSRP
708720	Mondi Mist & Spray Deluxe Sprayer - 2.1 Quart/2 Liter	$13.95

MONDI MIST & SPRAY PREMIUM TANK SPRAYER 1.5 QUART

- A superior quality, small capacity tank sprayer designed for use in the garden or home.
- Designed to provide maximum comfort, efficiency, safety and ease of use.
- Constructed from high grade plastic to ensure a long life and easy maintenance.
- Equipped with a swivel nozzle that adjusts from a jet stream to a fine mist spray.
- Packaged with a bonus 6" extension nozzle for harder to reach areas.
- Two year warranty.

Item No.	Description	MSRP
708725	Mondi Mist & Spray Premium Tank Sprayer - 1.5 Quart/1.4 Liter	$10.95

FISKARS EASY POUR WATERING CAN

This watering can offers both capacity and control. It holds 2.6 gallons yet is easy to carry and pour because of its unique handle design. Dual handles accommodate multiple hand positions – pick what's most comfortable. The hinged handle enables two-handed pouring for better maneuverability and control. The spout rotates for adjustable flow control, from a gentle shower to a steady stream. In addition, the filling hole is located on the side so the handles don't get in the way, making it easier to fill.

Item No.	Description	MSRP
708825	Fiskars Easy Pour Watering Can 2.6 gallon	$21.95

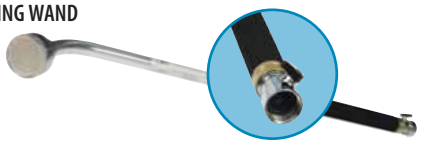
PRECIPITATOR 360°™ SPRAY BOTTLES

Item No.	Description	MSRP
708585	360°™ Sprayer 8 oz. Bottle	$3.00
708586	360°™ Sprayer 16 oz. Bottle	$3.25
708587	360°™ Sprayer 24 oz. Bottle	$3.50
708588	360°™ Sprayer 32 oz. Bottle	$3.75

The Precipitator 360°™ sprayer is equipped with a nozzle that rotates a full 360 degrees and holds that position to spray in any direction. By simply turning the nozzle, you eliminate the need to tilt the bottle. This improves efficiency, eliminates trigger failure and saves on product. So now you can spray up, down, left, right, under or over effortlessly.

MELNOR SHOWER HEAD WATERING WAND

- Shower head for gentle watering.
- Flow-control allows you to adjust flow without going back to faucet.
- 30" length.



Item No.	Description	MSRP
708800	Gentle Rain® Shower Head Watering Wand	$13.95

GRO PRO ADJUSTABLE HEAD TELESCOPING WATERING WAND

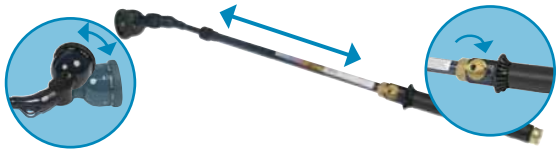
- 180º adjustable spray head.
- 9 dial spray head.
- Easily attaches to garden hose.
- Soft grip, ergonomic handle.
- Flow control.
- Telescoping wand adjusts from 28" up to 42" long.

Item No.	Description	MSRP
708820	Adjustable Head Telescoping Watering Wand	$21.95

MELNOR TELESCOPING WATERING WAND

Item No.	Description	MSRP
708805	Telescoping 8 Pattern Watering Wand	$30.95

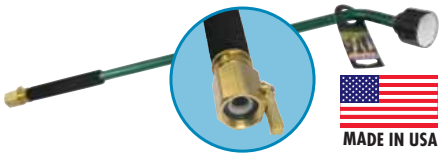
- Telescoping wand extends from 29" to 42".
- 8 spray patterns to meet all watering needs.
- Adjustable head for hard to reach watering areas.
- Front trigger for precise on and off watering control.
- Integrated flow-control allows you to adjust the water flow without going back to the faucet.



DRAMM RAIN WAND™ COLORMARK

Item No.	Description	MSRP
708810	Dramm Rain Wand™ 30"	$32.95

The Dramm Rain Wand™ is ideal for watering flowerbeds, gardens and shrubs. It utilizes the original 'soft-touch' 400 Water Breaker™ nozzle, which has been used by professional growers and nurserymen since 1945. With the Rain Wand™, you are able to apply large quantities of water quickly at the plant base, where it soaks deep into the soil. The fingertip shut-off valve reduces overall water consumption by applying water where and when you want it. Roots grow deep and the plant is protected from water stress while it receives the constant nutrition it needs. Colormark models include a 30" Anodized aluminum extension handle, 8" foam grip, brass water shut-off valve, Made in the USA. Lifetime consumer guarantee.

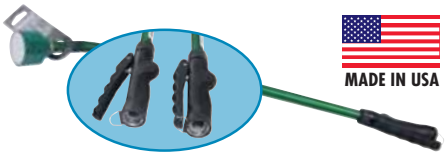


MADE IN USA

DRAMM RAIN WAND™ TOUCH N FLOW

Item No.	Description	MSRP
708815	Dramm Rain Wand™ 30" Touch N Flow Sunrise	$24.95

The Dramm Rain Wand™ is ideal for watering flowerbeds, gardens and shrubs. It utilizes the original 'soft-touch' 400 Water Breaker™ nozzle, which has been used by professional growers and nurserymen since 1945. With the Rain Wand™, you are able to apply large quantities of water quickly at the plant base, where it soaks deep into the soil. The lever activated shut-off valve reduces overall water consumption by applying water where and when you want it. Roots grow deep and the plant is protected from water stress while it receives the constant nutrition it needs. Touch N Flow Sunrise models have an anodized aluminum extension handle, lever activated water shut-off, color matched Water Breaker nozzle. Lifetime consumer guarantee.



MADE IN USA

BIG SHOT MEASURER

General purpose measuring pint glass. Graduation measurements include teaspoon, tablespoon, ounces and milliliters. Clear glass for easy and accurate measuring. Rated PG-13.

Item No.	Description	MSRP
740625	Big Shot Measurer - 16 oz.	$6.99

SYRINGE 100CC/ML

The EcoPlus 100 ml/cc syringe is a clean and accurate alternative to pouring liquids into a measuring cup or spoon. No more spills, splashing and loss of expensive nutrients, supplements and pest controls. The heavy duty plastic design features easy to read graduations in both metric (5ml) and U.S. (1/2 oz) increments. Simply pull the plunger to the desired measurement and dispense. Quick! Clean! Easy! You will never pour to measure again.

Item No.	Description	MSRP
740610	Syringe 100cc/ml	$5.49

SURE SHOT MEASURER

General purpose measuring shot glass. Graduation measurements include teaspoon, tablespoon, ounces and milliliters. Clear glass for easy and accurate measuring.

Item No.	Description	MSRP
740615	Sure Shot Measurer - 1.5 oz.	$3.59

INTERNATIONAL MEASURING MUG

This mug has graduated measuring in milliliters, pints, cups, ounces, tablespoons and teaspoons. Excellent all purpose measuring mug for all your liquid measuring needs.

Item No.	Description	MSRP
740630	International Measure Mug	$13.99

MEASURING CONTAINERS - GRADUATED

General purpose measuring containers. Chemically resistant polypropylene measurers. Easy to read U.S. and metric graduations printed in blue. Translucent for easy and accurate measuring. Strong reinforced handle.

Item No.	Description	MSRP
740055	100 ml Measuring Container	$7.15
740060	250 ml Measuring Container	$7.85
740065	500 ml Measuring Container	$10.45
740070	1 Liter Measuring Container	$15.00

NGW® MEASURING CUP-GRADUATED

General purpose measuring cups. Chemically resistant polypropylene measurers. U.S. and metric graduations. Translucent for easy and accurate measuring.

Item No.	Description	MSRP
740600	8 oz./250 ml Graduated Cup	$2.09
740605	16 oz./500 ml Graduated Cup	$2.79

GREEN EYE™ LED HEADLIGHT

Ideal for viewing plants at night without disturbing their growth cycle. The lightweight, compact Green Eye™ Headlight easily adjusts with its elastic band and tilting light mount. Ultra bright LED bulbs with 100,000+ hours of burn time. Customize your lamp settings with one click of the button. The settings are 4 lamps, 8 lamps, all lamps and flashing. Water resistant. Allows hands-free tasking. Uses three AAA batteries (not included).

Item No.	Description	MSRP
708027	Green Eye™ LED Headlight	$14.95

GREEN EYE™ LED CAP LIGHT

Ideal for viewing plants at night without disturbing their growth cycle. The lightweight, compact Cap Light easily attaches to hat brims. Made for rugged treatment and powered with 2 lithium coin batteries for up to 96 hours use. Ultra bright LED bulbs with 100,000+ hours of burn time. Completely water resistant. Allows hands-free tasking.

Item No.	Description	MSRP
708028	Green Eye™ LED Cap Light	$9.95

GREEN EYE™ LED TASK LIGHT

Ideal for viewing plants at night without disturbing their growth cycle. The lightweight Green Eye™ easily attaches to your ear to allow hands free gardening. Each high-intensity green LED lasts over 100,000 hours and they don't get hot. The snug fitting Green Eye™ can be worn on either ear because it is fully reversible. Uses one AAA battery (sold separately).

Item No.	Description	MSRP
708026	Green Eye™ LED Task Light	$14.95

GREEN EYE™ LED FLASHLIGHT

Ideal for viewing plants at night without disturbing their growth cycle. Light-weight and water-resistant. Each high-intensity LED green bulb lasts over 100,000+ hours. Uses three AAA batteries (not included).

Item No.	Description	MSRP
708029	Green Eye™ LED Flashlight	$12.95

RESCUE TAPE

NEW!

Item No.	Description	MSRP
380110	Rescue Tape 1" x 12' Black	$10.50
380115	Rescue Tape 1" x 12' Clear	$10.50

- Rescue Tape is the ultimate multi-purpose self-fusing repair tape.
- Incredible 950 PSI tensile strength.
- Insulates 8,000 volts per layer.
- Withstands 500° F degrees of heat.
- Remains flexible to - 85° F (-60° C).
- Creates a permanent air-tight, Water-tight seal in seconds.
- Never gets gummy or sticky.

BIG JAKE'S GARDEN TABLE

Item No.	Description	MSRP
1845	Big Jake's Garden Table	$559.95

Big Jake's Garden Table is the ultimate product for the serious gardener. This rust proof aluminum table is coated with a clear powder coating for a high gloss, durable finish. It offers a removable 18" x 45" x 1/2" thick "cutting board" type, plastic top. It has a debris catching gutter on the front and sturdy storage shelf. Easy to assemble. Weighs 51 lbs. Patent pending. Not stocked in all locations. Unit box size: 19" wide x 29" high x 55" long and weighs 78 lbs. **Additional shipping charges may apply.**

BAMBOO STAKES

Item No.	Description	Bag Qty	MSRP
800991	3' Bamboo Stakes	25	$2.99/bag
800993	4' Bamboo Stakes	25	$3.49/bag
800996	6' Bamboo Stakes (1/2" Diameter)	25	$15.49/bag
800998	8' Bamboo Stakes (3/4" Diameter)	25	$27.49/bag

Bamboo stakes are all natural, strong & very durable. They can be reused repeatedly for several growing seasons. With sizes of 3', 4', 6' & 8', these can support plants of all sizes.

REEL-ENZ PLANT SUPPORT SPOOLS

These spools are a simple and easy way to support your plants as they grow. Each spool contains 25 meters (82 ft) of line. They feature a built in hook so they can be securely attached to your support structure.

Item No.	Description	MSRP
740025	Reel-Enz Spools	$3.00

VELCRO® PLANT TIES

Plant Ties are an easy way to train vines or support plants. No knots required. The plant ties are adjustable, UV resistant and durable. Plant ties wrap around your plant and back onto themselves for a secure self-gripping hold.

Item No.	Description	MSRP
740080	Velcro® Plant Ties - 45' x ½" Roll	$3.69

NIE-CO-ROL

Supports plants easily with up to 60 inches of retractable line. Heavy duty plastic housing. Made in Holland.

Item No.	Description	MSRP
740075	100 Nie-Co-Rol Bag	$1.89/ea

VINE CLIPS

These plastic clips work great to support your plants while they grow. Simply attach the clip around the vine and then to a support. Use with Reel-Enz Spool.

Item No.	Description	MSRP
740045	Vine Clips	.10¢/ea

GARDENEER TRELLIS NETTING

Heavy-duty nylon netting is ideal for growing tomatoes, peas and all vine crops. 7" reach through mesh.

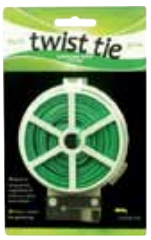
Item No.	Description	MSRP
740580	Trellis Netting 5' x 15'	$9.29
740585	Trellis Netting 5' x 30'	$14.29

GRO PRO TRELLIS NETTING

- Provides versatile plant support.
- Professional quality.
- Tangle-free.
- 6" reach through holes.
- Durable plastic allows multiple uses.
- Install horizontally or vertically.

NEW!

Item No.	Description	MSRP
740095	Trellis Netting 6' x 5'	$6.29
740100	Trellis Netting 6' x 10'	$11.95
740105	Trellis Netting 6' x 25'	$21.95



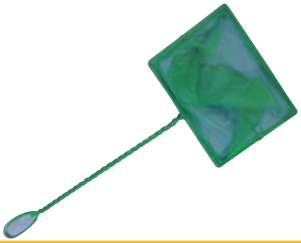
TWIST TIE

Ideal for tying plants, vegetables and vines to stakes and trellises. Plastic coated for gardening. 164 foot roll with built-in cutting tool.

Item No.	Description	MSRP
800055	Twist Tie dispenser with cutter - 164 ft	$3.95

ECOPLUS® RESERVOIR & TANK CLEANING NET

- 8" width.
- Soft nylon mesh netting.
- Vinyl coated wire handle.
- Durable construction.



Item No.	Description	MSRP
728570	EcoPlus® Cleaning Net	.99¢

FISKARS®

FISKARS® SOFTTOUCH® MICRO-TIP® PRUNING SNIP Model 9921

- Easy-open spring action reduces hand stress while cutting.
- Super sharp, Micro-Tip® blades give you top-of-the-line precision and control.
- Fully hardened stainless steel blades holds sharp edge longer.
- Comfortable Softgrip® handles reduce stress and are non-slip for safety.
- Right or left-handed use.
- Blade cover protects you and the blades when closed.
- Lifetime warranty.

Item No.	Description	MSRP
800015	Softtouch® Micro-Tip® Pruning Snip	$12.95

NEW!

FISKARS® TITANIUM SOFTTOUCH® MICRO-TIP® SNIPS

- Titanium Nitride coating resists scratches, wear and corrosion.
- Easy-action spring.
- Ergonomic, cushioned handles.
- Micro-tip® technology on blades.
- Easy-slide lock.
- Comfortable Softgrip® handles reduce stress and are non-slip for safety.
- Right or left-handed use.
- Blade cover protects you and the blades when closed.
- Lifetime warranty.

Item No.	Description	MSRP
800016	Softtouch® Titanium Micro-Tip® Pruning Snip	$18.85

FISKARS® COMFORT GRIP™ FLORAL SNIP Model 9638

Great for indoor gardening. Floral Snips are great for deadheading, shaping, pruning and houseplant maintenance. The compact design allows you to easily use in dense foliage without damaging the plant.

- Comfort Grip™ loop handles improve control, ease fatigue.
- Super sharp, Micro-Tip® blades give you top-of-the-line precision and control.
- Comfortable Softgrip® handles reduce stress and are non-slip for safety.
- Right or left-handed use.
- Fully hardened stainless steel blades holds sharp edge longer.
- Blade cover protects you and the blades when closed.
- Lifetime warranty.

Item No.	Description	MSRP
800020	Comfort Grip™ Floral Snip	$18.95

FISKARS® HOUSEPLANT SNIP Model 9636

We call it the "Houseplant Snip", but you'll use it as a household snip for all the thousands of little tasks where swift, sure cutting comes in handy. The light-fingered control and razor-sharp blades are ideal for houseplant maintenance and bonsai, not to mention opening a new CD case or snipping a ribbon.

- Fingertip control for small, detailed cuttings.
- Ideal for intricate houseplant cuttings.
- Right or left-handed use.
- Fully hardened stainless steel blades holds sharp edge longer.
- FiberComp™ construction-reinforced fiberglass composite materials provide strength and durability.
- Lifetime warranty.

Item No.	Description	MSRP
800025	Houseplant Snip	$6.95

ARS "Always Really Sharp"

ALWAYS REALLY SHARP (ARS) ALL PURPOSE SCISSORS Model SS-330H

This scissor can be used almost anywhere! These softbow scissors are a quick snipper for bonsai, small plants, flower stems, tape, string, and even electric wire. High carbon steel blades are hard chrome plated and marquench hardened to stay sharp longer than normal blades. Softbow handles provide all day comfort and are designed for ether left or right hand use. Length: 6.25".

Item No.	Description	MSRP
801250	ARS All Purpose Scissors	$20.95

ALWAYS REALLY SHARP (ARS) CURVED TIP SCISSORS Model SS-320BM

The slim blades are razor sharp and make it possible to pick fruit and remove culls in even the most crowded situations. Very popular for propagation. Soft bow grips fit any hand, reduce fatigue, and can be used by lefties. Blades made of carbon steel. Length: 6".

Item No.	Description	MSRP
801252	ARS Curved Tip Scissors	$20.95

ZENPORT PRODUCTS

FLORAL/THREAD SNIPS Model H370

These excellent quality snips offer stainless steel cutting blades and durable ABS plastic handles. They are perfect for fine clipping, including taking cuttings, removing dead foliage, etc. Also commonly used for thread cutting.

Item No.	Description	MSRP
800705	Floral/Thread Snips	$4.95

PRECISION MICRO SHEAR Model H356

The compact bypass shear offers smooth and precise action. Stainless steel curved blade and heavy duty plastic handle. Overall length is 6".

Item No.	Description	MSRP
800677	Precision Micro Shear	$11.95

MICRO BLADE PRUNER Model H355

Micro Blade Pruners have straight stainless steel blades to prevent rusting and are easy to sterilize. The handles have comfortable rubberized sides that improve gripping power. The pruning shear tips are narrow so they fit into dense foliage without damaging plants. Overall length is about 6 5/8".

Item No.	Description	MSRP
800675	Micro Blade Pruner	$11.95

CURVED MICRO BLADE PRUNER Model H355C

Curved Micro Blade Pruners have curved tip stainless steel blades to prevent rusting and are easy to sterilize. The handles have comfortable rubberized sides that improve gripping power. The pruning shear tips are narrow and curved to get in close on dense foliage without damaging plants.

Item No.	Description	MSRP
800676	Curved Micro Blade Pruner	$12.19

FOLDAWAY POCKET SNIPS Model H329

Item No.	Description	MSRP
800260	Pocket Snips	$6.95

Handy, fold-away pocket snips with 2.5 inch stainless steel blades. Safely folds away for storage in pocket.

NEEDLENOSE SHEAR Model H303

Item No.	Description	MSRP
800255	Needle Nose Shears	$9.95

Lightweight, needle nose shear with a wishbone spring. The blades are made of carbon steel.

STAINLESS STEEL HARVEST SHEARS WITH LONG, STRAIGHT BLADE Model H300S

Item No.	Description	MSRP
800240	Stainless Harvest Shears	$11.95

Features cutlery grade, polished stainless steel blades. Ideal for cutting flowers and vegetables. Easy to sterilize.

STAINLESS STEEL HARVEST SHEARS WITH LONG, CURVED BLADE Model H300SC

Item No.	Description	MSRP
800245	Stainless Harvest Shears (S0)	$11.95

Features cutlery grade, polished stainless steel blades. Ideal for cutting flowers and vegetables. Easy to sterilize.

7″ BYPASS PRUNING SHEAR - MULTI PURPOSE Model Z102

Item No.	Description	MSRP
800105	7″ Bypass Pruning Shear - Multi Purpose (S0)	$10.95

This pruner is designed for those with smaller hands. Slightly smaller (7" - 19 cm) and lighter (7 oz) than most pruners but it has all of the power, strength and quality workmanship of the others. The blades are slightly shorter so it is also facilitates fine cutting and is the choice of many florists.

HEAVY DUTY BYPASS PRUNER Model Z201

Easily cuts limbs up to 1" diameter. This tool features a replaceable, non-stick, carbon steel blade, a self-cleaning sap groove and a resilient shock absorbing bumper. Blade tension is adjustable. Length: 9.2"

Item No.	Description	MSRP
800155	Heavy Duty Bypass Pruner	$15.95

8.5″ BYPASS PRUNING SHEAR Model Z103

Euro design that is the choice of many professionals, but at a price that makes this the best choice for harvest and pruning labor crews. Tough, replaceable, carbon steel blade. Length: 8.5"

Item No.	Description	MSRP
800110	8.5″ Bypass Pruning Shear	$10.95

7.5″ DELUXE GARDENING SCISSORS Model ZS104

Item No.	Description	MSRP
800425	7.5″ Deluxe Gardening Scissors	$12.95

These soft-grip scissors are designed for a wide range of gardening, craft and horticulture applications. Length: 7.5"

6.5″ DELUXE FRUIT SCISSORS Model ZS105

Tough horticulture scissors, designed for seasons of rigorous use. Length: 6.5"

Item No.	Description	MSRP
800430	6.5″ Deluxe Fruit Scissors	$12.95

BONSAI/PRUNING SCISSORS Model ZS106

These long-reach scissors are perfectly designed for bonsai, floral, craft and horticulture applications. Length: 8.3"

Item No.	Description	MSRP
800435	Bonsai/Pruning Scissors	$12.95

DELUXE GRAPE/BERRY SCISSORS Model ZS109

Designed for years of use in harvesting grapes and other fruit. Tough carbon steel blades. Length: 165 mm (6.5"). Made in Japan.

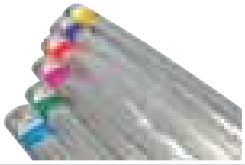
Item No.	Description	MSRP
800450	Deluxe Grape/Berry Scissors (S0)	$11.95

ALL PURPOSE STAINLESS SCISSORS Model ZS108

7" Stainless steel all-purpose scissors. Great for kitchen, garden, craft applications. Soft grips.

Item No.	Description	MSRP
800445	All Purpose Stainless Scissors	$11.95

SUNFILM MYLAR FILM



Used in indoor gardens to reflect the light back onto the plants. This film can be tacked or taped directly to a flat surface.

- Both sides metallized for optimum reflectivity.
- Neatly wound on 2" cores.
- Individually poly-bagged and labelled.

Item No.	Description	MSRP
730015	1 mil – 48" x 25 Ft	$18.95
730020	1 mil – 48" x 50 Ft	$29.95
730025	1 mil – 48" x 100 Ft	$55.95
730030	2 mil – 48" x 25 Ft	$25.95
730035	2 mil – 48" x 50 Ft	$45.95
730040	2 mil – 48" x 100 Ft	$81.95

SUN BLOCKER™ FOIL BUBBLE FILM

- Gardeners can better manage heating problems associated with indoor gardening with Sun Blocker™.
- Helps conserve energy.
- Sun Blocker is a barrier bubble film laminated between 2 layers of foil.
- Reflects up to 97% of all radiant heat.
- Inhibits growth of fungi or bacteria.

Item No.	Description	MSRP
730135	Sun Blocker Foil Bubble 4' x 25' Roll	$79.95
730140	Sun Blocker Foil Bubble 4' x 50' Roll	$139.95
730145	Sun Blocker Foil Bubble 4' x 100' Roll	$249.95

PANDA FILM - BLACK & WHITE POLY FILM

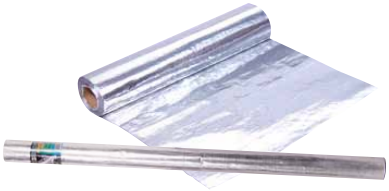
Used in growing areas - this is waterproof poly film that is black on one side and white on the other. Panda film works well as a reflective film (reflects 90% of the light striking it back to the growing area) or as a room partition. This is a very heavy duty film at a thickness of 5.5 - 6 mil.

Item No.	Description		MSRP
730090	10' x 25' Panda Film	NEW!	$26.95
730095	10' x 50' Panda Film	NEW!	$51.95
730100	10' x 100' Panda Film		$91.95

BLACK STRETCH FILM

Item No.	Description	Size	MSRP
730150	Black Stretch Film - 80 gauge	18" x 1500 ft	$29.95

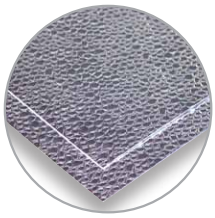
SUNFILM ULTRA



The ultimate reflective film that is 97% reflective. This film is extremely durable–puncture and tear resistant. Mesh reinforcement is woven into the film and is washable as well as waterproof. Dimensions: 48" by 50 feet.

Item No.	Description	MSRP
730050	Sunfilm Ultra Reflective Film	$79.99

SUN SHEETS™



95% reflective European aluminum 2' X 4' sheets. Four sheets come in one package. This is the same high-tech material that we use in our Sun System® reflectors. Line any growing area to create the ultimate grow room.

Item No.	Description	MSRP
960209	Sun Sheets™ - 2' x 4' (4 sheets)	$157.95

TARP ZIP-UP™

Peel and stick zipper system. Creates easy access into tarp or poly enclosures. Easy installation. Opens from either side. Hundreds of different applications. Great for containing dust, moisture and pests.

Item No.	Description	MSRP
730200	Tarp Zip-Up™	$12.29

TARP TABS

Add perimeter grommets for additional tie down points. Applied to both sides of the material for superior adhesion. Use on tarps, poly, mylars, or shrink wraps. Package includes 4 peel and stick grommets.

Item No.	Description	MSRP
730205	Tarp Tabs - 4 per package	$3.09

HIPPO SWIVEL CLIP

The Hippo Swivel Clip clamps onto any tarp, poly or other sheet material replacing torn out grommets or use to create a grommet where none existed before. No other product like it compares to our superior clamping power. Use the clip with the tighter grip. Blister card package with 4 clamps.

Item No.	Description	MSRP
730210	Hippo Swivel Tarp Clip - 4 per package	$9.95

EASYGROW REFLECTIVE FILM

Helping supply growers since 1998

1. A five layered foil eliminates thermal heat build-up within the actual covering.
2. The diamond pattern film insures light is diffused and reflected evenly, while stopping hot spots from developing.
3. These coverings retain up to 96% of thermal within the grow room to promote healthy happy plants.
4. Manufactured and certified to food grade standard (to prevent harmful toxic gases from being generated).

TRIED & TESTED LIGHTITE 100%

EASYGROW DIAMOND FUSION LIGHTITE FILM

Diamond diffused pattern to spread light more evenly. Produced to help eliminate grow room hot spots. 100% light tight (a true black out). PET coated to protect against corrosion and wear. With membrane memory to dramatically reduce creasing effect. Dimensions: 1.25 meters x 30 meters/4.1 feet x 100 feet.

Item No.	Description	Roll lbs	MSRP
730110	Lightite Diamond Fusion Film	13	$170.95

EASYGROW SILVER WHITE LIGHTITE FILM

A yield increasing spectrum enhanced silver reflector, applied to a gloss white - triple layered grow sheet. Lightite silver white grow sheet offers optimum light return and 100% light tight capability. Dimensions: 1.25 meters x 30 meters/4.1 feet x 100 feet.

Item No.	Description	Roll lbs	MSRP
730120	Lightite Silver - White Film	20	$129.95

EASYGROW WHITE LIGHTITE FILM

Item No.	Description	Roll lbs	MSRP
730130	Lightite White Film	31	$129.95

100% light tight, triple layered grow sheet with a center fold. White on both sides of the sheet but light tight to allow separate light cycles to perform within the same area. Dimensions: 3 meters x 30 meters/9.8 feet x 100 feet.

EC SHAKE™ NUTRIENT METER

Item No.	Description	MSRP
716010	EC Shake Nutrient Meter	$87.95

This revolutionary EC meter is powered by a magnet instead of a battery! A gentle shaking action generates the energy to power this simple, yet sophisticated meter. With just a few easy steps you will get a quick & accurate reading of the electrical conductivity (EC) of your nutrient solution. This patented meter will completely simplify your growing experience and success.

- Green LED display.
- No batteries required.
- Factory calibrated.
- Automatic temperature compensation.
- Automatic on/off function.
- Waterproof.
- 1 year warranty.

CWP INSTRUMENTS

E.C. DIPSTICK™

Item No.	Description	MSRP
716570	Control Wizard E.C. Dipstick™	$84.95

Now with the 4 most popular scales: EC, CF, 500:1 ppm, and 700:1 ppm! The E.C. Dipstick™ dissolved salts pen operates on 3 common inexpensive AA alkaline batteries. Measures in PPM, EC and CF scales. There is no calibration required. It calibrates itself each time you replace the batteries. The EC Dipstick™ is waterproof to one meter. 2 year limited warranty.

TDS WAND

Item No.	Description	MSRP
716571	TDS Wand	$89.95

The lighted display is large and easy to read. There are no mistakes when the temperature compensating microchip quickly senses the electro conductivity of the nutrient solution or water sample and automatically freezes the displayed reading. PPM, EC and CF scales are easily accessed by easy to read buttons. Cutting edge electronic circuitry keeps the meter in calibration for extended periods of time. The TDS Wand is waterproof from the electrode up to the display, water resistant from the display to the battery cap. Uses a common 9-volt alkaline battery for power. Use 1382 ppm (500 ppm – 1 EC) calibration buffer. 1 year limited warranty.

24-7 NUTRIENT MONITOR

Item No.	Description	MSRP
716572	24-7 Nutrient Monitor	$208.95
716573	24-7 pH Replacement Probe	$49.95
716579	PPM Replacement Probe	$49.95

The 24–7 Nutrient Meter from Control Wizard Products is a great all around meter for nutrient applications needing constant monitoring. It measures PPM, pH and Temperature and with its large illuminated display it is easy to read from a distance. Calibration screws are conveniently located on the front for easy access. 6 month limited warranty.

CONTROL WIZARD ACCURATE pH 7 & ACCURATE pH 8

Item No.	Description	MSRP
716575	Accurate pH 7 Soil pH & Moisture Meter	$64.95
716578	Accurate pH 8 Soil pH & Moisture Meter	$74.95

Control Wizard Products is now introducing its Accurate pH and moisture meter for soil growers. The Accurate pH 8 has a 12" probe. Until now, soil growers with the need to keep careful tabs on the pH of their soil has had to rely on either cheap, poor quality meters that are very expense and hard to get. This new meter is the best of both worlds. It is relatively inexpensive and is manufactured to high quality standards. No batteries are required. 1 year limited warranty.

BLUELAB METERS

BLUELAB SOIL PH METER

Item No.	Description	MSRP
716190	Bluelab Soil pH Meter	$245.00
716192	Bluelab Soil pH Replacement Probe (SO)	$105.00

If you need to measure the pH level of soil, media or substrates, then the Bluelab® Soil pH Meter is just what you need! Our meter can be used by everybody from the home enthusiast to commercial growers. 5 year Bluelab® Guarantee (6 month for probe).

- Quality soil pH probe included.
- Supplied in a lockable protective case.
- Calibration solutions included.
- Simple push button calibration.
- Auto turn off function (extends battery life).
- Large easy to read LCD display.
- Low battery indicator.
- 2 x alkaline AAA batteries included.
- Lightweight and portable.

BLUELAB GUARDIAN MONITOR

Item No.	Description	MSRP
716336	Bluelab® Guardian Monitor	$345.00

In just one glance it measures all three critical parameters for successful growth pH, conductivity and temperature.

- Adjustable brightness display.
- Large easy to read, Plant Safe green LED displays.
- Selectable values for conductivity and temperature.
- Simple push button pH calibration system.
- No calibration required for conductivity and temperature.
- Silent alarm for both high and low settings.
- Settings retained when power lost (non-volatile memory).
- Temperature compensation.
- An international power supply.
- Water resistant design.
- 2 year Bluelab® Guarantee (6 month on probe).

BLUE LAB ORIGINAL TRUNCHEON™ METER

Reliable! Easy to Use!
No calibration required

Item No.	Description	MSRP
716050	Original Truncheon™ Meter	$135.00

Features of this reliable meter include: EC, CF and ppm scales, factory calibrated, fully waterproof, auto turn on and off. It is powered by three standard AA batteries. There are no external switches or adjustment knobs. 5 year Bluelab® Guarantee.

BLUELAB COMMERCIAL TRUNCHEON®

Item No.	Description	MSRP
716049	Bluelab Commercial Truncheon®	$135.00

- EC(0.4 - 6.0), CF(4 - 60) and ppm scales(TDS and 700 scale.)
- Fully waterproof.
- Factory calibrated.
- Auto sense on and off.
- No external switches or adjustable buttons.
- Battery life minimum 1 year (or shelf life of battery).
- 5 year Bluelab® Guarantee.

The Bluelab Commercial Truncheon® Nutrient Meter measures the strength of a nutrient solution, just like the Bluelab Truncheon® Nutrient Meter. The Commercial Truncheon Nutrient Meter however, has been designed for hydroponic crops that require a higher than normal EC or CF requirement during their growing cycle. A reading of up to 6.0 EC or 60 CF is available.

BLUELAB COMBO METER™

716445

Item No.	Description	MSRP
716441	Bluelab Combo Meter™	$299.95
716445	Replacement pH Probe	$81.95

- Light weight and portable.
- Measures pH, Nutrient and Temperature.
- Three display options for nutrient - EC, CF, ppm (500 scale).
- Two display options for temperature (°C or °F).
- Three calibration points, 4, 7 and 10 pH.
- Temperature at a push of a button.
- Simple push button pH calibration.
- Auto turn off function.
- Large 13mm (1/2") digital display for easy reading.
- Supplied with quality probes and pH calibration solutions.
- Low battery indicator with long life 3 AAA batteries.
- 5 year Bluelab® Guarantee (6 month for pH probe).

MILWAUKEE METERS

WATERPROOF pH TESTER Model pH51

Item No.	Description	MSRP
716600	pH51 waterproof pH tester	$73.95
716601	MA73600 replacement probe for pH51	$51.95
722300	MA9004 - 220ml 4.01 buffer solution	$10.95/ea
722305	MA9007 - 220ml 7.01 buffer solution	$10.95/ea
716301	M10004B - 20ml packet 4.01 buffer solution	$1.00/ea
716306	M10007B - 20ml packet 7.01 buffer solution	$1.00/ea

Waterproof pH tester with 2 point manual calibration, ± 0.1 pH accuracy, range: 0.0 to 14.0 pH, replaceable MA73600 pH electrode with battery technology providing 1500 hours of battery life.

WATERPROOF TDS TESTER Model T75

Item No.	Description	MSRP
716605	T75 waterproof TDS tester	$77.95
716606	MA73075 replacement probe for T75	$71.95
722325	MA9062 - 220ml 1382 ppm TDS solution	$10.29/ea

Waterproof TDS tester with automatic temperature compensation and 1 point manual calibration range: 0.0 to 1999 ppm (mg/L), replaceable MA73075 probe.

WATERPROOF TDS TESTER Model T76

Item No.	Description	MSRP
716610	T76 waterproof TDS tester	$77.95
716611	MA73076 replacement probe for C65/T76 (S0)	$68.49

Waterproof TDS tester with automatic temperature compensation and 1 point manual calibration range: 0.0 to 9990 ppm (mg/L), replaceable MA73076 probe.

pH TESTER Model pH 600 AQ

Item No.	Description	MSRP
716642	pH 600 AQ pH tester	$33.95
722305	MA9007 - 220ml 7.01 buffer solution	$10.95/ea
716306	M10007B - 20ml packet 7.01 buffer solution	$1.00/ea

Milwaukee's most affordable pH tester, range: 0.0 to 14.0 pH, with one point manual calibration ,and accuracy of_+ 0.2 pH. Battery Life: 700 hours. Calibration solution sold separately. 30 day warranty.

pH MONITOR Model SMS110

Item No.	Description	MSRP
716660	SMS110 pH monitor	$116.95
716661	MA911B/2 replacement probe for SMS110 (S0)	$56.95
722300	MA9004 - 220ml 4.01 buffer solution	$10.95/ea
722305	MA9007 - 220ml 7.01 buffer solution	$10.95/ea
716301	M10004B - 20ml packet 4.01 buffer solution	$1.00/ea
716306	M10007B - 20ml packet 7.01 buffer solution	$1.00/ea

pH monitor, range: 0.0 to 14.0 pH, with 2 point manual calibration, and accuracy of ± 0.2 pH. Set point range: 3.5 to 7.5 pH, and led visual alarm active when reading is higher than set point. Supplied with 12v DC power adapter, MA911B/2 double junction pH electrode, 20ml. pH 7.01 buffer solution and screwdriver for calibration.

Item No.	Description	MSRP
716650	SMS410 TDS monitor	$117.49
706651	MA812D/2 replacement probe for SMS410 (SO)	$49.95
722346	M10442B - 20ml packet 1500 ppm solution (SO)	$1.09/ea

TDS MONITOR Model SMS410

TDS monitor, range: 0-1990 ppm with accuracy of ± 2% full scale and with 1 point manual calibration and automatic temperature compensation. Set point range 700 to 1800 ppm, and led visual alarm active when reading is lower than set point. Supplied with 12v DC power adapter, MA812B/2 conductivity probe and 20ml. 1500 ppm packet buffer solution and screwdriver for calibration.

SMART PORTABLES

Item No.	Description	MSRP
716665	SM100 Portable pH meter	$109.95
722300	MA9004 - 220ml 4.01 buffer solution	$10.95/ea
722305	MA9007 - 220ml 7.01 buffer solution	$10.95/ea
716301	M10004B - 20ml packet 4.01 buffer solution	$1.00/ea
716306	M10007B - 20ml packet 7.01 buffer solution	$1.00/ea

PORTABLE pH METER Model SM100

pH meter, range: 0.0 to 14.0, with 2 point manual calibration, and accuracy of ± 0.2 pH. Supplied with a MA911B/1 double junction pH electrode, 9v battery, 20ml pH 7.01 packet buffer solution and screwdriver for calibration.

COMBINATION 3 IN 1 pH - EC - TDS METER

Item No.	Description	MSRP
716615	SM802 smart pH/EC/TDS combination meter	$229.95
716616	MA850 replacement probe for SM802	$98.95
722300	MA9004 - 220ml 4.01 buffer solution	$10.95/ea
722305	MA9007 - 220ml 7.01 buffer solution	$10.95/ea
716301	M10004B - 20ml packet 4.01 buffer solution	$1.00/ea
716306	M10007B - 20ml packet 7.01 buffer solution	$1.00/ea
722346	M10442B - 20ml packet 1500 ppm TDS solution	$1.09/ea

SMART pH/EC/TDS COMBINATION METER Model SM802

Smart pH/EC/TDS combination meter, range: 0.00 to 14.00 pH, 0 - 4000 ppm, 0.00 - 6.00 mS/cm, accuracy of ±0.20 pH and ±2% full scale for EC and TDS. Supplied with a MA850 combination electrode, 9v battery, 20ml packet buffer solution of pH 7.01, 1500 ppm and 1413 µS/cm.

Item No.	Description	MSRP
716695	MR32 Sugar Refractometer ATC	$114.95

SUGAR REFRACTOMETER ATC Model MR32

Sugar refractometer for general purpose with ATC. Range 0 - 32% brix, resolution 0.1%. Use this item to gauge the health of your plants by measuring their sugar content. This method is used by horticulturists to indicate plant stress before the plant shows symptoms. Simple to use - just extract one drop of liquid from the petiole tissue (leaf stem) and easily measure sugar content.

OAKTON METERS

Item No.	Description	MSRP
716104	Waterproof EcoTestr™ pH 1	$70.95

OAKTON® ECOTESTR™ pH 1

- Economical, pocket sized meter.
- Waterproof, dust proof housing that floats.
- Easy to use; push-button calibration with auto buffer recognition.
- Includes transparent electrode cover/sample cup.
- Push-button calibration, HOLD function, and error messages.
- Range: 0.0 to 14.0 pH.
- Power: four 1.5 Volt button cell batteries (included).

Item No.	Description	MSRP
716106	Waterproof EcoTestr™ pH 2	$85.95

OAKTON® ECOTESTR™ pH 2

- Automatic temperature compensation.
- Waterproof, dust proof housing that floats.
- Easy to use; push-button calibration with auto buffer recognition.
- Includes transparent electrode cover/sample cup.
- Range: 0.0 to 14.0 pH.
- Low-cost pocket sized meter.
- Push-button calibration, HOLD function, and error messages.
- Power: four 1.5 Volt button cell batteries (included).

Item No.	Description	MSRP
716115	Waterproof EcoTestr™ TDS Low	$82.95

OAKTON® ECOTESTR™ TDS LOW

OAKTON ECOTestr TDS Low pocket meter features a large ergonomically designed display so that you can easily view measurements at a glance. The stainless steel electrodes are both rugged and chemical resistant, for use in a variety of applications. Other features include ATC (Automatic Temperature Compensation), Hold Function, it is completely waterproof, and has a transparent plastic cap that can be used as a container for calibration or measurement purposes.

- Range: 0-1990 ppm.
- Resolution: 10 ppm.
- Accuracy: 1% Full Scale.
- Conversion Factor: 0.4 to 1.

OAKTON® MULTI PT Testr 35

Item No.	Description	MSRP
716108	Multi PT Testr 35 (pH/TDS/Temp)	$184.29

- One pocket sized meter for pH, TDS and temperature!
- Up to 5 point pH calibration with NIST or USA auto buffer recognition.

Great for water, laboratory or plant use, this multi Testr features single-junction pH electrodes for longer life and wider range of sample compatibility. Pin-style conductivity sensors feature stainless steel electrodes for chemical resistance and durability. Replaceable sensor module saves you money by reusing the meter body. Advanced features include auto-shutoff, user-adjustable temperature coefficient, self-adjusting TDS, and low-battery indicator.

OAKTON® DOUBLE JUNCTION pHTESTR® 10

716047

Item No.	Description	MSRP
716046	Waterproof pHTestr® 10	$131.49
716047	Replacement Electrode for pH 10/20/30 (35624-38)	$95.95

- Replaceable double junction electrode. Use Testr body many times over, which saves you money.
- Automatic Temperature Compensation (ATC).
- Push-button three-point calibration.
- Microprocessor-based.
- Auto buffer recognition.
- Hold function; auto-off; error messages.
- Certifiable to IP67 standards.
- pH range - 1.0 to 15.0 pH.

OAKTON® DOUBLE JUNCTION pHTestr® 30

716047

Item No.	Description	MSRP
716048	Waterproof pHTestr® 30	$159.95
716047	Replacement Electrode pH 10/20/30 (35624-38)	$95.95

- High ±0.01 pH accuracy.
- Simultaneous pH and temperature (°C) display.
- pH range - 1.0 to 15.0 pH.
- Three point push-button calibration.
- Double junction electrode ideal for dirty water, heavy sulfides and organics.
- Increased reference gel volume offers significantly longer electrode life.
- Certifiable to IP67 standards—waterproof and dust proof housing floats.
- Replaceable sensor lets you reuse same meter body, saving you money.
- Automatic temperature compensation.

OAKTON® ULTRA BASIC TDSTESTR

716040

Item No.	Description	MSRP
716107	Waterproof Ultra Basic TDSTestr	$85.95
716040	Replacement Electrode for TDS & EC Testrs (35661-17)	$62.95

Our waterproof microprocessor TDSTestr basic offers push-button calibration and ±1% accuracy in a rugged waterproof housing. Never worry about losing your tester in a pond or tank; these testers float!

- Feature push-button calibration and high ±1% full scale accuracy!
- Waterproof, dust proof housing that floats is certifiable to IP67 standards.
- Automatic Temperature Compensation.
- Replaceable sensor lets you reuse same meter body, saving you money.
- 0 - 1990 PPM.
- Hold function, Auto-Off.

OAKTON® pH 4.01, pH 7.00 & 1413 TDS SOLUTION

716110 716112 716114

Item No.	Description	Size	MSRP
716110	Oakton® Calibration pH 4.01	500ml	$17.49
716112	Oakton® Calibration pH 7.00	500ml	$17.49
716114	Oakton® 1413 TDS Calibration Solution	500ml	$15.95

HM DIGITAL METERS

HM DIGITAL WATERPROOF EC/TDS/TEMP COMBO METER Model COM-100

Item No.	Description	MSRP
716160	HM Waterproof EC/TDS/Temp Combo Meter	$74.95
716175	EC/TDS Replacement Probe (Special Order)	$46.23

- Measures electrical conductivity (EC), total dissolved solids (TDS) and temperature.
- Three different calibration options (KCl, 442TM, NaCl), each with its own non-linear conversion factor.
- Automatic Temperature Compensation (ATC) using three temperature coefficients.
- Waterproof housing.
- Measurement Range: 0-9990 µS; 0-8560 ppm (auto-ranging).
- Digital Calibration (push button).
- Auto-off function, data-hold function and low-battery indicator.
- Display: large and easy-to-read LCD screen includes simultaneous temperature reading.
- Factory Calibrated: The COM-100 meter is calibrated with a 1413 µS solution. The meter can be recalibrated with digital calibration using the push buttons, rather than a screwdriver.
- Includes a cap, batteries and lanyard.
- One year warranty.

HM DIGITAL WATERPROOF pH METER Model PH-200

Item No.	Description	MSRP
716165	HM Waterproof pH Meter	$99.95
716180	pH Replacement Probe	$44.95

- Measures pH and Temperature.
- Auto-ranging three point calibration with digital fine tuning.
- Includes 4 pH buffer solution in a sponge embedded in a clear cap.
- Waterproof housing.
- Simultaneous temperature display.
- Measurement Range: 0-14 pH.
- Digital automatic calibration (one point), with digital fine tuning.
- Auto-off function, data-hold function and low-battery indicator.
- Display: large and easy-to-read LCD screen includes simultaneous temperature reading.
- Factory Calibrated: The PH-200 meter is three-point factory calibrated to 4, 7, and 10 pH. The meter can be recalibrated with digital calibration using the push buttons, rather than a screwdriver.
- Includes a cap, batteries, lanyard, and pH 7.0 buffer.
- One year warranty.

HM DIGITAL HANDHELD TDS TESTER Model TDS-3

Item No.	Description	MSRP
716187	HM Handheld TDS-3 Tester	$36.95

NEW!

- Ideal for commercial use. Includes a carrying case with belt clip.
- Highly efficient and accurate due to its advanced microprocessor technology.
- Hold Function: saves measurements for convenient reading and recording.
- Auto-off function: the meter shuts off automatically after 10 minutes of non-use to conserve batteries.
- Measurement Range: 0-9990 ppm.
- Built-in digital thermometer
- Display: large and easy-to-read LCD screen.
- Factory Calibrated: our meters are calibrated with a 342 ppm NaCl solution. Meters can be recalibrated with a mini-screwdriver.
- Also available in "x 10" mode: reads in increments only of 10 ppm (0-9990 ppm).
- 3 year warranty.

HM DIGITAL AQUAPRO TDS WATER TESTER Model AP-1

Item No.	Description	MSRP
716188	HM Aquapro TDS Water Tester	$44.99

NEW!

- Measures total dissolved solids (TDS) and temperature.
- Automatic Temperature Compensation (ATC)
- Water-resistant housing
- Measurement Range: 0-5000 ppm
- Digital Calibration (push button)
- Auto-off function, data-hold function and low-battery indicator.
- Display: large and easy-to-read LCD screen includes simultaneous temperature reading.
- Factory Calibrated: The AquaPro is calibrated with a 342 ppm NaCl solution. The meter can be recalibrated with digital calibration using the push buttons, rather than a screwdriver.
- Includes a cap and batteries.
- One year warranty.

HM DIGITAL IN-LINE DUAL TDS MONITOR Model DM-1

Item No.	Description	MSRP
716186	In-Line Dual TDS Monitor	$41.95

NEW!

- Displays TDS levels of the feed water and product water with in & out electrode probes.
- Highly efficient and accurate due to its advanced microprocessor technology.
- Auto-Off function conserves battery power. The unit shuts off automatically after 10 minutes of non-use.
- Dual Range 0-9990 ppm.
- Factory Calibrated: our meters are calibrated with a 342 ppm NaCl solution. Meters can be recalibrated with a mini-screwdriver.
- Comes equipped with Mur-lok® Quick-Connect T-fittings.
- Installs quickly and easily.
- One year warranty.

HM DIGITAL TDS CALIBRATION SOLUTION

Item No.	Description	MSRP
716170	1000 PPM Calibration Solution	$6.95

For optimal performance, re-calibrate your meters periodically or if testing TDS or conductivity levels in wide or different ranges.

- NaCl calibration solution.
- Comes in lightweight HDPE plastic bottles.
- Sealed with a coated foam liner.

HANNA INSTRUMENTS

HANNA GROCHEK® COMBO pH/EC/TDS/TEMPERATURE MONITOR (Model HI 991404)

Item No.	Description	MSRP
716800	Hanna pH/EC/TDS Temp Continuous Combo Monitor	$194.95
716801	Hanna Replacement pH Probe (HI1293)	$111.95

716801

The Combo HI 991404 meter is designed for continuous, high accuracy pH, EC/TDS and temperature measurements. These microprocessor indicators continuously monitor the three most important nutrient parameters in hydroponics, greenhouses and horticultural applications with a single instrument. These indicators feature a large, dual-level, backlit LCD to give you instantaneous readings of pH, EC or TDS and temperature, even from a distance.

At startup, these indicators perform a self-check to assure proper working condition. HI 991404 stability indicator and hold features prompt the user when to take the reading and freezes the display for easy and accurate recording.

Calibration and temperature compensation is automatic, while the EC/TDS conversion factor and temperature coefficient (ß) are user adjustable for application-specific measurements.

These instruments are supplied with an advanced, non-clogging double junction pH electrode and a rugged conductivity probe that will withstand even the most aggressive environments. The instruments are powered by a 12 volt dc transformer and are easy to install and use.

HANNA pH GROCHEK® WATER RESISTANT pH INDICATOR (Model HI 981401N)

Item No.	Description	MSRP
716805	Hanna pH Indicator with Electrode	$111.95
716806	Hanna Replacement pH Probe (HI1286)	$61.95

716806

HI 981401N has been designed to meet the Grower's need for equipment suited to the aggressive environments found in agricultural and hydroponics applications. The housing is water-resistant and features a molded eye which allows installation right above the sample to be monitored.

Measurements are highly accurate and can be verified with one or two point calibrations. With a 12 Volt DC power supply included with the meter, low battery failures are never an issue. The electrode is interchangeable and the connector is well-protected behind a waterproof sheathing. The meter is supplied with a stainless steel probe, preventing potential grounding problems and ensuring extended electrode life.

The gel-filled pH electrode has been specially designed to address the needs of growers. Its design guarantees greater clogging resistance in fertilizer solutions with high concentrations of phosphate, nitrate, etc.

HANNA GROCHEK® TDS MONITOR (Model HI 983301N)

Item No.	Description	MSRP
716870	Hanna GroCheck TDS Monitor	$111.95

NEW!

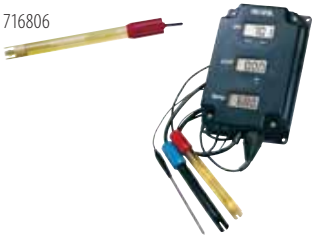
These state-of-the-art meters have been engineered with a host of features suited to the aggressive environments commonly found in agricultural applications; housings and cable connections have been sealed against vapor and humidity.

With a 12 volt DC power supply included with the meter, low battery failures are never an issue. Locate the meter right above the sample to be monitored or take it with you for spot checking. Select HI 983301N for TDS measurements with the common 0.7 TDS conversion factor (4-4-2) or HI 983301N/5 which uses a 0.5 conversion factor.

Both the TDS and EC meters come with a probe specifically made for horticulture and hydroponics applications. The probe compensates for temperature variations automatically, is easy to clean and is very stable, needing little maintenance.

HANNA pH/TDS/TEMPERATURE MONITOR (Model HI 981504/7)

716806



Item No.	Description	MSRP
716810	Hanna pH/TDS/Temp Monitor	$244.95
716806	Hanna Replacement pH Probe (HI1286)	$61.95

Designed for continuous monitoring of pH, TDS and temperature, the HI 981504 is simple to install and can be placed above the sample to be tested. pH, TDS and temperature measurements are simultaneously displayed on three backlit LCDs which can be easily viewed at a distance - even in low light. This means no more switching between parameters.

The HI 1286 gel-filled pH electrode is provided with a waterproof sheath to protect the BNC connector. The unique design of the electrode provides longer life in aggressive solutions. The HI 7634 TDS probe is easy to clean and requires little maintenance. Measurements are accurate and the meter can be calibrated at one or two points for pH and at a single point for TDS. Temperature range is factory calibrated.

HANNA WATERPROOF pH/EC/TDS/TEMPERATURE METER WITH pH ELECTRODE DIAGNOSTIC (HI 9813-6)

716816

Item No.	Description	MSRP
716815	Hanna Portable pH/EC/TDS/Temp	$259.95
716816	Hanna Replacement pH Probe (HI1285-6)	$123.95
716817	Hanna Clean & Cal Check Solution 25/case (SO)	$46.95

pH electrodes are commonly designed to produce and output signal equal to 0 mV when immersed in a solution with pH 7. But a constant output value at pH 7 occurs as a result of certain adverse events, such as: A broken bulb in the pH electrode, A short circuit in the cable or connector, or Magnetic force leakage in the cable or connector (for example, in case of excessive humidity).

In these situations, the instrument displays a false reading at pH 7 and the user may not be aware that corrective measures are necessary; particularly if the user is anticipating a pH neutral reading. To avoid this problem, HANNA® developed F.S.T. technology for HI 9813-6. With this special security system, a system failure will force a fixed value close to pH 4, rather than pH 7, and render the problem clearer to the user.

For added confidence in your measurements, the meter is equipped with two LEDs and a "CHECK" button. While pressing this button, upon immersing the electrode in the Cal-Check solution HI 50021P, one of the LEDs will light up to indicate the status of the meter. The green LED ("OK") indicates the probe is working correctly, while the red LED ("C&C" Clean & Cal) indicates the electrode needs attention.

HANNA COMBO pH/EC/TDS/TEMPERATURE TESTER WITH LOW RANGE EC (Model HI 98129)

Item No.	Description	MSRP
716820	Hanna Combo Waterproof pH/EC/TDS/Temp	$191.95
716831	Hanna Replacement pH Probe (HI73127)	$55.95

The HI 98129 Combo waterproof tester offer high accuracy pH, EC/TDS and temperature measurements in a single tester! No more switching between meters for your routine measurements. The waterproof Combo (it even floats) has a large easy-to-read, dual-level LCD and automatic shut-off. pH and EC/TDS readings are automatically compensated for the effects of temperature (ATC). This technologically advanced tester has a replaceable pH electrode cartridge with an extendable cloth junction as well as an EC/TDS graphite electrode that resists contamination by salts and other substances. This gives these meters a greatly extended life. Your tester no longer needs to be thrown away when the pH sensor is exhausted.

The EC/TDS conversion factor is user selectable as is the temperature compensation coefficient (ß). Fast, efficient, accurate and portable, the Combo pH, EC/TDS and temperature tester brings you all the features you've asked for and more!

HANNA DiST 5 WATERPROOF (LOW RANGE) EC/TDS/TEMPERATURE TESTER (Model HI 98311)

716826

Item No.	Description	MSRP
716825	Hanna DiST 5 Waterproof EC/TDS/Temperature	$123.95
716826	Hanna Replacement Probe (HI73311) (SO)	$66.95

The original DiST (Dissolved Solids Tester) was first introduced in 1986 by HANNA®. Since then, Conductivity and Total Dissolved Solids measurements have never been easier. DiST's ease-of-use, in combination with its affordability, made it the standard in EC and TDS measurement. HANNA® continues the tradition of innovation with the DiST 5. For this series, we have included all the features you have asked for and more! The DiST 5 6 includes features such as a replaceable graphite electrode, adjustable TDS ratio, temperature in °C or °F, automatic temperature compensation (ATC) with adjustable ß, battery level indicator, stability indicator, automatic shut-off and automatic calibrating all in a floating, waterproof casing. This 3-in-1 tester is unmatched in EC/TDS/Temperature measurements!

HANNA WATERPROOF PHEP 4 TESTER WITH REPLACEABLE ELECTRODE (Model HI 98127)

716831

Item No.	Description	MSRP
716830	Hanna Waterproof PHEP 4	$109.95
716831	Hanna Replacement pH Probe (HI73127)	$55.95

When HANNA® introduced its first version of the pHep (pH electronic paper) in 1986, it immediately revolutionized the standard in pH measurement. pHep's ease-of-use in combination with its affordability made it possible for non-technical and technical personnel alike to measure pH on the spot, accurately and inexpensively throughout a variety of industries. Since its introduction, over 1 million pHeps have gone to satisfied customers around the world.

We at HANNA® have always valued the comments and suggestions coming from our customers. For this series, we have included all of the features you have asked for and more! The pHep 4 and pHep 5 include features such as a dual-level LCD, battery level indicator, replaceable pH electrode cartridge, instability indicator, automatic shut-off and automatic calibration all in a floating, waterproof casing.

HANNA WATERPROOF pH/EC/TDS METER (Model HI 9813-0)

Item No.	Description	MSRP
716835	Hanna Portable pH/EC/TDS Meter	$244.95
716836	Hanna Replacement pH Probe (HI1285-0)	$139.95

HI 9813-0 allows you to measure pH, EC (conductivity) and TDS with just one instrument! This meter has a full-spectrum pH measurement range.

The EC range goes to 4.00 mS/cm. In the TDS range, both instruments use a conversion factor from 0.56 to 0.72 for fertilizer readings, to ensure your measurements fully conform to industry standards.

The specially engineered HI 1285-0 probe is interchangeable and the pH electrode utilizes a fiber junction and gel electrolyte which are particularly suitable when used in fertilizer solutions.

HI 9813-0 and HI 9813-5 measure TDS in the 0 to 1999 ppm range.

HI 9813-5 also performs temperature measurements, with the special probe HI 1285-5.

716836

HANNA PHEP TESTER (Model HI 98107)

Item No.	Description	MSRP
716840	Hanna PHEP Tester	$55.95

The HI 98107 (pHep®), which is the result of over two decades of research and manufacturing experience, is the updated version of our widely popular 96107 (pHep®). Today the redesigned pHep series feature a rugged and ergonomically enhanced casing that fits comfortably in your hand and a larger LCD which makes it easier to read at any angle. With the latest innovation of a non-clogging fiber junction the new pHep meters last much longer. Simply pull out 1-2 mm (1/8") of the junction fiber to completely renew the junction.

The pHep® offers a Range of 0.0 to 14.0 pH and an Accuracy of ±0.1 pH. This tester is calibrated manually to 2 points.

HANNA PRIMO TDS TESTER

Item No.	Description	MSRP
716833	Hanna Primo TDS Tester	$22.95

The Primo TDS tester provides a fast and dependable way to measure the Total Dissolved Solids in your water samples. It is ideally suited for the rigorous demands of water quality professionals, who will appreciate the practicality of Primo's easy-to-read LCD when demonstrating the before and after results of conditioning and filtration systems. Temperature is compensated automatically to ensure the readings are consistent to the standard or reference temperature.

Operating and routine maintenance has never been easier. Primo TDS uses a single button at the top of the meter. Press it once and the meter is powered and ready for use. Press and hold the button for a few seconds and Primo automatically enters calibration mode. Simply open a sachet of the calibration solution, dip the probe and within seconds the meter recognizes the calibration solution and calibrates itself! Maximum battery life is managed by Primo's power microprocessor, which automatically turns it of after 5 minutes.

HANNA BATTERIES FOR pH/TDS PENS 12/PACK (Model HI 740026-P)

Item No.	Description	MSRP
716865	Hanna Batteries for pH/TDS Pens - 12 per pack	$19.95

HANNA CALIBRATION SOLUTIONS

Item No.	Description	Size	MSRP
716845	Hanna pH 4 Calibration Solution (HI 7004L)	16 oz.	$17.95
716850	Hanna pH 7 Calibration Solution (HI 7007L)	16 oz.	$17.95
716855	Hanna 1500 PPM Calibration Solution (HI 70442L)	16 oz.	$19.49
716860	Hanna 1413 uS/CM Calibration Solution (HI 7031L)	16 oz.	$19.49

HANNA 20 ML PACKET SOLUTIONS

NEW!

Item No.	Description	Size	MSRP
716875	pH 4.01 Calibration Solution	20 ml	$1.29/ea
716876	pH 7.01 Calibration Solution	20 ml	$1.29/ea
716877	pH 10.01 Calibration Solution	20 ml	$1.29/ea
716878	Cleaning Solution	20 ml	$1.59/ea
716879	1382 PPM TDS Solution	20 ml	$1.29/ea
716880	1500 PPM TDS Solution	20 ml	$1.29/ea

EARTH JUICE® NATURAL UP™ & NATURAL DOWN™

pH adjusting crystals that will, once and for all, eliminate the hassles and worries of spilling, splashing and dealing with harsh liquid pH adjusters. Use to adjust the pH of fertilizer and plant micronutrient foliar solutions.

Item No.	Description	Size	MSRP
722155	Natural UP™	2 lbs	$17.78
722175	Natural DOWN™ (While supplies last)	2 lbs	$14.91
722173	Natural DOWN™ NEW!	1.6 lbs	$15.90

CONTROL WIZARD 1382 CALIBRATION SOLUTION

Control Wizard Products 1382 Conductivity Standard. Use to calibrate all meters that use the 1 EC to 500 ppm water standard.

Item No.	Description	Size	MSRP
716574	Control Wizard 1382 Calibration Solution	4 oz.	$4.95

BLUELAB® METER CALIBRATION SOLUTIONS

Item No.	Description	MSRP
716447	pH Probe Clean - Calibration Kit	$28.95
716052	Nutrient Probe Cleaning Kit	$17.95

CF/EC cleaning kit.
- Full color laminated instructions.
- Conductivity standard solution.
- De-canter vessel.
- Liquid probe cleaner.
- Chamois (probe cleaning instrument).

716052

pH cleaning and calibration kit:
- Full color laminated instructions.
- Calibration solutions.
- De-canter vessels.
- Probe cleaner.
- Toothbrush.

716447

FUTURE HARVEST DEVELOPMENT METERS

TRI-METER pH REPLACEMENT PROBE

Item No.	Description	MSRP
716320	Tri-Meter pH Replacement Probe - 3 ft cable	$66.95

Replacement probe for the Tri-Meters or the pH Meter. 6 month limited warranty.

TRI-METER (EC/pH/TEMP) CONTINUOUS MONITOR

This meter gives you the ability to monitor pH level, Nutrient Levels in EC and Nutrient Temperature.

This continuous monitoring system requires no batteries, just plug it in to an AC wall receptacle and the meter will remain in a calibrated mode for months. The Nutradip® Tri-Meter, with automatic temperature compensation, is the best way of measuring the strength of nutrients in your water, pH, and monitoring temperature at the same time. 2 year limited warranty on meter. 6 month limited warranty on the probe.

Item No.	Description	MSRP
716310	Tri-Meter Continuous Monitor (EC/pH/Temp) #204	$232.95

TRI-METER (PPM/pH/TEMP) CONTINUOUS MONITOR

This meter gives you the ability to monitor pH level, Nutrient Levels in PPM and Nutrient Temperature.

This continuous monitoring system requires no batteries, just plug it in to an AC wall receptacle and the meter will remain in a calibrated mode for months. The Nutradip® Tri-Meter, with automatic temperature compensation, is the best way of measuring the strength of nutrients in your water, pH, and monitoring temperature at the same time. 2 year limited warranty on meter. 6 month limited warranty on the probe.

Item No.	Description	MSRP
716315	Tri-Meter Continuous Monitor (PPM/pH/Temp) #202	$232.95

NUTRADIP® CMS pH METER

The Nutradip® CMS (constant monitoring system) pH Meter is the reliable way to measure the acidity or alkalinity in your water. It is a continuous monitoring pH meter with automatic temperature compensation. 2 year limited warranty on meter. 6 month limited warranty on the probe.

Item No.	Description	MSRP
716325	Nutradip® CMS pH Meter	$132.95

NUTRADIP® CMS PPM METER

The Nutradip® CMS (constant monitoring system) Nutrient Meter has automatic temperature compensation and measures the TDS ppm/EC in your water. 2 year limited warranty on meter. 6 month limited warranty on the probe.

Item No.	Description	MSRP
716330	Nutradip® CMS PPM Meter	$99.95

RAPITEST METERS

4 WAY ANALYZER Model 1880

Item No.	Description	MSRP
716752	4 Way Analyzer	$34.95

Measures four different levels for fertilizer, light, moisture and pH. Includes instructions and guides for all four measuring levels.

- Instantly tells you the fertility of your soil.
- Measures the light intensity in foot candles.
- Instantly tells you when to water your plants by measuring the moisture level.
- Instantly tells you how acid or alkaline your soil is by measuring the pH level.

SOIL TEST KIT Model 1601

Kit includes: 4 color comparators, 40 test capsules, 10 each for pH, N, P and K, complete instructions for adjusting soil pH, fertilization guidelines and pH preferences list for over 450 plants for the home, yard and garden. Plants need food (nutrients) for healthy growth. Nitrogen, Phosphorus and Potash (N, P and K for short), play a vital role in plant growth. This kit enables you to test all four levels of pH, Nitrogen, Phosphorus and Potash.

Item No.	Description	MSRP
716756	Soil Test Kit - pH, N, P, K	$15.99

pH SOIL TESTER Model 1612

Kit includes: color comparator, 10 pH test capsules, complete instructions for adjusting soil pH and pH preferences list for over 450 plants for the home, yard and garden. All you do is put a sample of soil into the comparator, add powder capsule, add water, shake and watch the color develop. Then, note your results. Fast, easy and it only takes a few minutes.

Item No.	Description	MSRP
716755	pH Soil Tester	$4.69

SOIL pH METER Model 1840

- Instantly tells you how acid or alkaline your soil is.
- Check which plants suit your garden.
- Enables you to alter soil condition.
- Includes pH preferences for over 400 plants.

Item No.	Description	MSRP
716750	Soil pH Meter	$21.95

MINI pH TESTER Model 1815

- Tests the acidity of soil.
- Check which plants suit your soil.
- Enables you to alter soil conditions.
- Use for fruits, flowers, shrubs and vegetables.
- No batteries required.

Item No.	Description	MSRP
716753	Rapitest™ Mini pH Tester	$8.95

SOLUTIONS

TECHNAFLORA pH UP AND pH DOWN

Item No.	Description	Size	MSRP
716461	pH UP	Liter	$11.09
716462	pH Up	4 Liter	$22.20
716464	pH Down	Liter	$11.09
716465	pH Down	4 Liter	$22.20

Technaflora's pH Up and pH Down enable the gardener to moderate and maintain optimum pH levels. The pH scale is a measure that describes the relative acidity or alkalinity of a solution or medium. Both pH-balancing aids are manufactured using the highest-quality ingredients: potassium hydroxide to raise pH, and nitric acid to lower pH. While ensuring stringent industry safety standards are met, Technaflora's pH Up and pH Down are potent and effective in small doses.

pH CALIBRATION KIT Model PHB-T8 & PHB-T16

These solutions are used to calibrate pH meters to assure they are accurate and working properly. You should check your pH meter frequently because the properties of the meters membrane is constantly changing from normal use and aging. We recommend a two point calibration between 4.0 and 7.0 to assure that your meter is accurate across the scale. This is why the Genesis solution is available in twin packs of 4.0 and 7.0.

Item No.	Description	Size	MSRP
722420	pH Calibration Kit, pH 4.01 & 7.01	8 oz. Twin Packs	$20.00
722425	pH Calibration Kit, pH 4.01 & 7.01	16 oz. Twin Packs	$28.00

pH ELECTRODE STORAGE SOLUTIONS

Use to store your pH meter electrode between use. This solution is designed to keep your electrode sensing membrane and reference junction clean and unclogged and ready for use. Store your electrode directly in a small cup of solution or saturate a sponge in the cap of your meter for storage between use. This will prevent your permeable glass membrane from becoming dry and from mineral deposits clogging the surface. This solution is designed to equalize the osmotic pressure of the reference solution in your meter junction to keep the reference solution from seeping out and prematurely aging your meter. Should your electrode membrane dry out soak it in this solution for at least two hours before use. NEVER STORE AN ELECTRODE IN DISTILLED OR DEIONIZED WATER.

Item No.	Description	Size	MSRP
722440	Electrode Storage Solution	8 oz.	$10.00
722445	Electrode Storage Solution	16 oz.	$12.50

ELECTRODE CLEANING SOLUTIONS Model ECS-T8

Used to clean meter tip. Works for both pH and conductivity meters. Comes as a two part A and B cleaning solution to remove both organic and inorganic deposits from meter sensors. Use monthly or as needed to refresh your meter and keep it working optimum. Soak tip in part A for 5 min, then part B for 5 min and then back in part A for 5 more minutes and rinse with tap water.

Item No.	Description	Size	MSRP
722430	Electrode Cleaner, Part A & B	8 oz. Twin Packs	$20.00

TRI-PACK CALIBRATION SOLUTIONS (pH 4.01, pH 7.01 & ESS)

User friendly Tri-Packs contain everything you need to properly calibrate or maintain your meters.

Item No.	Description	Size	MSRP
722460	pH Calibration (pH 4.01, pH 7.01 & ESS)	8 oz. Tri-Pack	$33.00

GH METER CALIBRATION SOLUTIONS

Item No.	Description	Size	MSRP
722015	pH 4.01	8 oz.	$7.54
722020	pH 4.01	Quart	$21.50
722030	pH 7.01	8 oz.	$7.54
722035	pH 7.01	Quart	$21.50
722005	1500 PPM Reference Solution	8 oz.	$8.20

General Hydroponics™ uses the highest quality reference solutions, allowing growers to calibrate many popular brands of PH, EC and TDS meters (NaCl scale or the 442 scale). General Hydroponics™ technicians check each batch to ensure that our solutions are precisely calibrated and yield reliable readings each time they are used.

722015 722020 722030 722035 722005

GH pH CONTROL KIT

Contains: 8 oz. pH UP, 8 oz. pH DOWN, 1 oz. indicator and vial.

Item No.	Description	MSRP
722080	pH Control Kit	$17.20

GH pH TEST KIT

1 oz. test kit with test vial offers wide spectrum testing (pH 4.0 to 8.5). This concentrated solution requires only 5 drops per test.

Item No.	Description	Size	MSRP
722145	pH Test Kit	1 oz.	$7.54

GH pH DOWN LIQUID & GH pH DOWN DRY

This concentrated acid formula is used to lower the pH in a reservoir.

This powdered acid formula is easy to handle and ship. Lightweight in comparison to liquids. Widely recognized as a consistent and reliable product.

Item No.	Description	Size	MSRP
722120	pH Down (liquid)	Quart	$10.76
722125	pH Down (liquid)	Gallon	$26.90
722130	pH Down (dry)	1.5 lbs	$10.76

GH pH UP LIQUID & GH pH UP DRY

Concentrated base formula is used to raise the pH in a reservoir.

This powder based formula is made to raise the pH in a reservoir. Lightweight in comparison to liquids.

Item No.	Description	Size	MSRP
722090	pH Up (liquid)	Quart	$10.76
722095	pH Up (liquid)	Gallon	$26.90
722105	pH Up (dry)	1.5 lbs	$10.76

TITAN CONTROLS® APOLLO 4™ - 120 VOLT IN-LINE TIMER

This product provides 24 hour lighting control for up to a 1000 watt ballast from a 120 Volt outlet.

The Apollo 4 is compatible with all 120 volt ballasts that feature a Smart Volt power cord. This includes: Sun System 1, 6 & 10, Harvest Pro, Harvest Pro Elite, Budget Gro, Galaxy and Lumatek ballasts. This timer makes lighting control simple!

- 24 hour lighting control.
- Non-detachable captive trippers are easy to set.
- Plastic cover keeps dust and moisture out of timer.
- Easy to understand & simple to use.
- Only the highest quality components are used.
- Controllers designed by our industry, for our industry.
- 13 Amps/120 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
734135	Titan Controls® Apollo 4™ - 120 Volt In-line Timer	$53.95

TITAN CONTROLS® APOLLO 5™ - 240 VOLT IN-LINE TIMER

This product provides 24 hour lighting control for up to a 1000 watt ballast from a 240 Volt outlet.

The Apollo 5 is compatible with all 240 Volt ballasts that feature a Smart Volt power cord. This includes: Sun System 1, 6 & 10, Harvest Pro, Harvest Pro Elite, Budget Gro, Galaxy and Lumatek ballasts. This timer makes lighting control simple!

- 24 hour lighting control.
- Non-detachable captive trippers are easy to set.
- Plastic cover keeps dust and moisture out of timer.
- Easy to understand & simple to use.
- Only the highest quality components are used.
- Controllers designed by our industry, for our industry.
- 13 Amps/240 Volts/60 Hz.
- 3 year warranty.

Item No.	Description	MSRP
734140	Titan Controls® Apollo 5™ - 240 Volt In-line Timer	$57.95

TITAN CONTROLS® APOLLO 6™

Item No.	Description	MSRP
734110	Titan Apollo 6™ 24 Hr. Analog Timer with 15 Minute Intervals	$13.95

NEW!

The Apollo 6 - 24 hour programmable timer is the perfect timing solution for your hydro systems. With a 15 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 6 has 96 non-detachable 15 minute trippers and can be configured in numerous timing schedules to meet the most demanding timing requirements.

- One (1) outlet.
- 15 minute intervals.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Runs lights, pumps, fans, etc.
- 15 Amps/120 Volts/60 Hz./1800 Watts.
- 1 year warranty.

TITAN CONTROLS® APOLLO 7™

Item No.	Description	MSRP
734112	Titan Apollo 7™ 24 Hr. Digital Timer	$18.95

NEW!

The Apollo 7 - 24 hour digital timer is the perfect timing solution for your hydro systems. With a 15 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 7 may be set to 1 minute intervals and run 8 separate schedules per day. The Apollo 7 can be configured in numerous timing schedules to meet the most demanding timing requirements.

- One (1) outlet.
- 1 minute intervals.
- Battery back-up feature saves settings in case of power failure.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Only the highest quality components are used.
- Runs lights, pumps, fans, etc.
- 15 Amps/120 Volts/60 Hz./1800 Watts.
- 1 year warranty.

Helpful hint: If not functioning properly, plug in for 5 minutes and press the reset button. This generally fixes any problem.

TITAN CONTROLS® APOLLO 8™

Item No.	Description	MSRP
734100	Titan Apollo 8™ Two Outlet 24 Hr. Analog Timer	$17.95

The Apollo 8 - 24 hour programmable timer is the perfect timing solution for your hydro systems. With two outlets and a 15 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 8 has 96 non-detachable 15 minute trippers and can be configured in numerous timing schedules to meet the most demanding timing requirements.

- Two (2) outlets.
- 15 minute intervals.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Runs lights, pumps, fans, etc.
- 15 Amps/120 Volts/60 Hz./1800 Watts.
- 1 year warranty.

TITAN CONTROLS® APOLLO 9™

Item No.	Description	MSRP
734105	Titan Apollo 9™ Two Outlet Digital Timer	$22.95

- The Apollo 9 - 24 hour digital timer is the perfect timing solution for your hydro systems. With two outlets and a 15 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 9 may be set to 1 minute intervals and run 8 separate schedules per day. The Apollo 9 can be configured in numerous timing schedules to meet the most demanding timing requirements.
- Two (2) outlets.
- 1 minute intervals.
- Battery back-up feature saves settings in case of power failure.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Only the highest quality components are used.
- Runs lights, pumps, fans, etc.
- 15 Amps/120 Volts/60 Hz/1800 Watts.
- 1 year warranty.

Helpful hint: If not functioning properly, plug in for 5 minutes and press the reset button. This generally fixes any problem.

TITAN CONTROLS® APOLLO 10™

Item No.	Description	MSRP
734145	Titan Apollo 10™ 240 Volt 24 Hr Analog Timer	$18.95

NEW!

The Apollo 10 - 240Volt/24 hour programmable timer is the perfect timing solution for your hydroponic systems. With a 10 amp capacity, it's easy to set to run your lights, pumps, fans, etc. The Apollo 10 has 96 non-detachable 15 minute trippers and can be configured in numerous timing schedules for any timing configuration that the grower may require. Flexible, dependable and easy to use!

- One (1) outlet.
- 15 minute intervals.
- Heavy duty construction.
- Easy to use & simple to operate.
- Plastic enclosure resists dust and moisture.
- Only the highest quality components are used.
- Runs lights, pumps, fans, etc.
- 10 Amps/240 Volts/60 Hz/2400 Watts.
- 1 year warranty.

INTERMATIC® MULTI-PURPOSE DT620 - 2 OUTLET DIGITAL TIMER

Item No.	Description	MSRP
734046	DT620 CL Intermatic 2 Outlet Digital Timer	$29.95

NEW!

- Turns lights and appliances on and off automatically.
- Auto adjusts to sunrise/sunset time for dusk/dawn setting.
- Automatic Daylight Saving Time option.
- Variable ON/OFF setting option for added security.
- Control lamps, appliances, electronics, heaters, air conditioners.
- Up to 28 ON/OFF settings.
- Sunrise, sunset, daily, weekday, weekend options.
- Battery backup with low battery indicator.
- Convenient on/off indicator light.
- Easy set up and operation.
- Large easy to read display.
- Displays current date and time.
- 2 timed receptacles.
- Grounded plug and receptacles.
- Electrical Ratings: 15 Amps, 1800 Watts Inductive, 500 Watts Tungsten, 125 Volts AC, 60 Hz, 1/3 HP.

INTERMATIC (GRASSLIN) T240 HEAVY DUTY A/C - 24 HOUR ELECTRO MECHANICAL PLUG-IN TIMER

Item No.	Description	MSRP
734047	T240 Heavy Duty A/C Timer	$20.95

Features 24 hour electro-mechanical plug in timer. Programming resolution of 15 minutes. It has a manual override. Great for window A/C 240V AC or electric heaters. Grounded 3-conductor plug and receptacle. Running indicator and captive trippers.

SPECIFICATIONS:
Switch Rating: 20 amps resistive @ 240 Volt AC.
Ambient Temperature Range: 14° F to 122° F.

Experiencing Irregular Availability

INTERMATIC (GRASSLIN) CP924 - 24 HOUR & 7 DAY ELECTRONIC PLUG-IN TIMER

Features 12 programs (6 on; 6 off)/programming: 1 minute intervals. Built-in battery for reserve carry-over. Easy to program Manual switch. Grounded 3-conductor plug and receptacle.

SPECIFICATIONS:
Switch Rating: 15 amps resistive @ 120 Volt AC.
Ambient Temperature Range: 14° F to 122° F.

Experiencing Irregular Availability

Helpful hint: If not functioning properly. Plug in for 5 minutes and press the reset button. This generally fixes any problem.

Item No.	Description	MSRP
734045	CP924 Digital Plug-In Timer	$29.95

INTERMATIC (GRASSLIN) T35 - 24 HR ELECTROMECHANICAL PLUG-IN TIMER

Programming: 15 minute intervals. Features a manual overdrive. Grounded 3-conductor plug and receptacle.

SPECIFICATIONS:
Switch Rating: 15 amps resistive @ 120 Volt AC.
Ambient Temperature Range: 14° F to 122° F.

Experiencing Irregular Availability

Item No.	Description	MSRP
734040	T35 Plug-In Timer	$17.49

INTERMATIC® HEAVY-DUTY PLUG-IN 240 VOLT TIMER

- Automatically controls 240 volt air conditioners, heaters, heavy-duty appliances and lamps.
- 3,750 watt capacity.
- Plugs directly into wall outlet.
- 2 ON / 2 OFF settings per day.
- 3-prong 220-240 volt grounded plug and receptacle.
- Manual override ON / OFF switch.

Item No.	Description	MSRP
734020	HB112C Intermatic 15amp Timer - 240 Volt	$21.95

INTERMATIC® HEAVY-DUTY PLUG-IN TIMER

This heavy duty, grounded timer is ideal for automatically controlling air conditioners, personal computers, heaters, heavy-duty appliances and HID lighting fixtures. It plugs directly into a wall outlet. Featuring 3 ON/3 OFF settings per day, 3-prong grounded plug and receptacle and a manual override on/off switch.
TN311C - 1875W/120/1H.P./120V Maximum motor load.

Item No.	Description	MSRP
734015	TN311C Intermatic 15amp Timer	$20.49

KILL A WATT

Measures electrical consumption accurately within 0.2% and is ETL approved. Features large LCD screen which displays 8 critical units of measurements. Enables you to cost forecast.

Item No.	Description	MSRP
716450	Kill A Watt	$39.95

PLANT INTENSITY LIGHT METER Model LIM2500

A precision instrument that measures the light intensity in foot candles expressly for the purpose of plant care; equipped with the Universal-Sensor-Probe, capable of reading light at any angle or in any location. Comes with complete book of light and its effects upon plant growth, plant development and seed germination. Tells how to grow healthy, thriving plants.

Item No.	Description	MSRP
716740	Plant Light Intensity Meter	$29.95

4 WAY ANALYZER Model 1880

Measures four different levels for fertilizer, light, moisture and pH. Includes instructions and guides for all four measuring levels.

- Instantly tells you the fertility of your soil.
- Measures the light intensity in foot candles.
- Instantly tells you when to water your plants by measuring the moisture level.
- Instantly tells you how acid or alkaline your soil is by measuring the pH level.

Item No.	Description	MSRP
716752	4 Way Analyzer	$34.95

MINI MOISTURE TESTER Model 1810

- Instantly tells you when to water your plants.
- Prevents over watering.
- Includes watering needs for over 100 plants.
- Ideal for plants grown in window boxes, hanging baskets and grow bags.
- No batteries required.

Item No.	Description	MSRP
716754	Mini Moisture Tester	$7.95

HEAVY-DUTY CONTRACTOR GRADE TIME SWITCH

734030

734035

Item No.	Description	MSRP
734030	T101 Timer with metal case (120V)	$65.95
734035	T104 Timer with metal case (208-277V)	$70.95

- Heavy duty lockable metal enclosure.
- Unbreakable.
- Heavy duty gear train.
- Tamper proof design.
- ½" & ¾" knock outs.
- Easy to set.
- T101 - 120 volt/AC/60 Hz/Single pole/Single throw/40 amp.
- T104 - 208 to 277 volt/AC/60 Hz/Double pole/Single throw/40 amp.

30 AMP LIGHTING CONTROLLER

Item No.	Description	MSRP
734057	30 Amp Lighting Controller	$299.95

The 30 Amp lighting controller will handle a total of 4000 watts of lights. It comes prewired with four (4) 240 Volt outlets, two (2) 120 Volt outlets and a 30 Amp incoming power cord. This unit provides a innovative safety feature by adding convenient circuit breakers on the front of the controller in case of a power surge or other electrical occurrences. It also comes with its own 24 hour timer to activate the controller via a 120 Volt relay trigger cord. All in one box, ready to plug in and get growing!

- Timer allows you to activate your lights for a variety of lighting schedules.
- Rugged steel enclosure protects controller from harsh environments.
- Runs fans for air cooled reflectors on timed 120 Volt outlet.
- Easy to use & simple to install.
- 30 Amps/240 Volt/60 Hz./4000 Watts.
- 1 year warranty.

50 AMP LIGHTING CONTROLLER

Item No.	Description	MSRP
734059	50 Amp Lighting Controller	$429.95

The 50 Amp lighting controller will handle a total of 8000 watts of lights. It comes prewired with eight (8) 240 Volt outlets, two (2) 120 Volt outlets and a 50 Amp incoming power cord. This unit provides a innovative safety feature by adding convenient circuit breakers on the front of the controller in case of a power surge or other electrical occurrences. It also comes with its own 24 hour timer to activate the controller via a 120 Volt relay trigger cord. All in one box, ready to plug in and get growing!

- Timer allows you to activate your lights for a variety of lighting schedules.
- Rugged steel enclosure protects controller from harsh environments.
- Runs fans for air cooled reflectors on timed 120 Volt outlet.
- Easy to use & simple to install.
- 50 Amps/240 Volt/60 Hz./8000 Watts.
- 1 year warranty.

See Titan Controls in the Environmental Controls section for additional timing products.

ECOPLUS® LARGE DISPLAY THERMOMETER/HYGROMETER

- Measures indoor/outdoor temperature and indoor humidity.
- Stores the min/max values of the indoor/outdoor temperature and indoor humidity.
- Switch between °C and °F.
- Clock function.
- 12/24 hour mode switch.
- Water proof temperature probe.
- Uses 1 AAA battery (not included).

Item No.	Description	MSRP
716560	EcoPlus® Large Display Thermometer/Hygrometer	$24.95

LIGHT METER - SUN SYSTEM®

NEW!

- Premium quality.
- 5 digit display.
- Measures in foot candles & lux.
- Automatic power off.
- Automatic zero when power on.
- Range: Up to 4,000 fc & 40,000 lux.
- Batteries included.

Item No.	Description	MSRP
716097	Sun System® Light Meter	$99.95

ECOPLUS® DIGITAL THERMOMETER/HYGROMETER WITH REMOTE SENSOR

Item No.	Description	MSRP
716555	EcoPlus® Digital Thermometer/Hygrometer with One Remote Sensor	$36.95
716557	EcoPlus® Wireless Remote Sensor	$21.95

- Large screen digital readout.
- Wireless sensor transmits up to 50 feet.
- Expandable to accept 2 additional sensors.
- Waterproof casing is chemical and UV resistant.
- Displays degrees in F or C.
- 2 AA batteries included.

Wireless Sensor:
- For use with EcoPlus Digital Thermometer & Hygrometer #716555.
- Transmits up to 50 feet.
- 2 AAA batteries included.

TEMPSHOOTER™

Item No.	Description	MSRP
800050	TempShooter™	$39.95

The TempShooter™ Infrared Thermometer with laser sighting is excellent for a variety of grow room applications. This compact unit is extremely easy to use and is quite reliable. Protect your plants and equipment with TempShooter™.

Applications:
- Plants leaf surface temperature.
- Light systems – ballasts & reflectors.
- Reservoir water.
- Heating & air conditioning systems (HVAC).
- Pumps.
- Climate control.
- Identifying duct leaks.

Technical Specs:
- Response time: 1 second.
- Range: -27º F to 482º F.
- Accuracy: +/- 2º.
- Modes: Max/Min/Lock.
- Red sighting laser.
- 2 batteries included.
- 1 year warranty.

PREMIUM NURSERY POTS

Item No.	Description	ID Bottom x Top x Depth inch	West MSRP	East MSRP
724800	1 Gallon Premium Nursery Pot	5 x 6⅛ x 7	.46¢	.53¢
724805	2 Gallon Premium Nursery Pot	7 x 8½ x 8½	$1.05	$1.20
724810	3 Gallon Premium Nursery Pot	8⅝ x 10 x 8⅞	$1.60	$1.85
724815	5 Gallon Premium Nursery Pot	9⅝ x 11⅛ x 10¼	$2.33	$2.73
724816	5 Gallon "Tall" Medium Duty Nursery Pot	8¾ x 12¼ x 10½	$1.98	$2.25
724820	7 Gallon Premium Nursery Pot	12⅞ x 14¼ x 11⅝	$4.80	$5.55
724825	10 Gallon Premium Nursery Pot	14½ x 16 x 11¾	$5.65	$6.60
724830	15 Gallon Premium Nursery Pot	14½ x 16⅞ x 15	$7.53	$8.66
724835	20 Gallon Premium Nursery Pot	17⅛ x 19⅝ x 16⅞	$11.13	$12.86

The premium quality, injection molded, nursery pots are much thicker and durable than traditional "blow molded" nursery pots. These are the best quality pots on the market. Grip lip for easy movement. Made in the USA. See our Premium Clear Saucers to find the correctly sized saucer for each pot.

MONDI SUPER SOFTY NURSERY POTS

Item No.	Description	MSRP
724850	1 Gallon Super Softy Nursery Pot	.26¢
724855	2 Gallon Super Softy Nursery Pot	.68¢
724860	3 Gallon Super Softy Nursery Pot	$1.34
724865	5 Gallon Super Softy Nursery Pot	$1.48

NEW!

mondi™

- High quality UV protected plastic.
- Construction that is recyclable.
- Ultra flexible, compact and easy starter pots solution that hold their shape despite being extra soft.
- Ample drainage holes.
- Available in many sizes for all stages of growth.

ROOT POTS

NEW!

- Made from 100% recycled material.
- Root Pots are both reusable and biodegradable.
- For soil & soilless gardens.
- Allows water to evaporate more evenly.
- Auto-prunes roots & prevents root circling .
- Allows evaporative cooling in hot climates & provides thermal insulation in cold climates.
- Creates a dense & fibrous root structure.
- Compact storage.

Root Pots last for multiple seasons of gardening and will generally begin to break down after about 3 to 5 years. They are designed to allow roots to breathe. Root Pots are not tapered like plastic pots, so they stand up well to strong winds and heavy harvests. Root Pots can be used with drip lines or hydroponic flood trays.

Item No.	Description	W x H Inches	MSRP
728841	Root Pot 1 Gallon	6 x 7.5	$1.75
728842	Root Pot 2 Gallon	8.5 x 8.5	$2.25
728844	Root Pot 3 Gallon	9 x 8	$2.75
728846	Root Pot 5 Gallon	11 x 10.25	$4.00
728848	Root Pot 7 Gallon	13.875 x 12	$5.00
728851	Root Pot 10 Gallon	16 x 12	$6.00
728852	Root Pot 15 Gallon	17 x 15	$7.00
728854	Root Pot 20 Gallon	19.875 x 15.875	$10.00
728856	Root Pot 25 Gallon	21 x 16.5	$12.00
728858	Root Pot 30 Gallon	24 x 16.5	$15.00
728861	Root Pot 45 Gallon	27 x 18	$20.00
728862	Root Pot 65 Gallon	32 x 18	$23.00
728864	Root Pot 100 Gallon	38 x 20	$29.00
728866	Root Pot 150 Gallon	45 x 22	$34.00
728868	Root Pot 200 Gallon	50 x 24	$39.00
728871	Root Pot 250 Gallon (SO)	55 x 24	$44.00
728872	Root Pot 300 Gallon (SO)	60 x 24	$49.00
728874	Root Pot 400 Gallon (SO)	70 x 24	$59.00
728876	Root Pot 500 Gallon (SO)	80 x 24	$69.00
728878	Root Pot 600 Gallon (SO)	90 x 24	$79.00

SMART POTS

By taking advantage of the benefits of traditional plastic gardening containers while eliminating the shortcomings, Smart Pots truly live up to their name! These soft growing containers allow more air to reach the growing medium and roots, improving drainage and keeping the root system from overheating on hot days. Plant roots also benefit from their natural tendency to grow into soft surfaces like the Smart Pot, becoming thick and healthy instead of circling the inside of the pot and becoming root-bound. These pots are aeration containers allowing the air to prune the plant root structure. Simply remove the containers before transplanting. These pots will establish the plants quicker after transplanting.

Item No.	Description	Pot Size	Volume (Gal)	MSRP
724700	1 Gallon Smart Pot	7" x 5.5"	.83	$3.50
724705	2 Gallon Smart Pot	8" x 7"	1.9	$3.95
724710	3 Gallon Smart Pot	10" x 8.5"	2.9	$4.95
724715	5 Gallon Smart Pot	12" x 10.5"	5.1	$5.95
724720	7 Gallon Smart Pot	14" x 10.5"	7.0	$6.95
724725	10 Gallon Smart Pot	16" x 12.5"	10.9	$8.95
724730	15 Gallon Smart Pot	18" x 14.5"	16.0	$9.95
724735	20 Gallon Smart Pot	20" x 14.5"	19.7	$11.95
724740	25 Gallon Smart Pot	21" x 16.5"	24.7	$12.95
724745	30 Gallon Smart Pot	24" x 16.5"	32.3	$14.95
724750	45 Gallon Smart Pot	27" x 18"	44.6	$16.95
724755	65 Gallon Smart Pot	32" x 18"	62.7	$22.95
724760	100 Gallon Smart Pot	38" x 20"	98.2	$29.95
724763	150 Gallon Smart Pot (SO)	45" x 22"	151.5	$39.95
724765	200 Gal Smart Pot	50" x 24"	200	$49.95
724766	300 Gal Smart Pot (SO)	60" x 24"	293.8	$69.95
724767	400 Gal Smart Pot (SO)	70" x 24"	399.8	$79.95
724769	48" x 48" Liner (SO)	48" x 48" x 12"	151	$39.95

ROSE BUCKET

Rose bucket is another quality Dutch container that works great with one Hugo block, Growcubes, Granulate, coconut fiber or other loose media. Four bottom and four side holes for excellent drainage. Made with heavy duty plastic. Thicker than standard pots. Dimensions: 7.6" x 7.6" x 9.7" and Capacity: 1.7 gallons

Item No.	Description	MSRP
724385	Rose Bucket	$3.89

MAXIPOT

This excellent quality Dutch container hold two Hugo's or can be used for any loose media. Four bottom and four side holes for excellent drainage. Thicker than standard pots. Dimensions: 9.6" x 9.6" x 11.5" and Capacity: 3.1 gallons.

Item No.	Description	MSRP
724390	Maxipot	$4.89

GIANT POT

This large, durable Dutch pot can be used for a variety of gardening applications. 16 drain holes for excellent drainage. Great for use with all types of growing media. Made with heavy duty plastic. Thicker than standard pots. Dimensions: 12" x 12" (top) x 8.5" x 8.5" (bottom) x 12" high and capacity: 4.75 gallons.

Item No.	Description	MSRP
724395	Giant Pot	$6.14

SQUARE PLASTIC POTS

Nice quality pots made from a slightly thinner material than the above pots. Great for a variety of hydroponic and soil applications.

Item No.	Description	MSRP
724425	5.5" x 5.5" x 6" Plastic Pots	.59¢

BLACK SQUARE PLASTIC POTS

Square plastic pots for hydroponic or soil use.

Item No.	Description	MSRP
724135	5" x 5" x 5" Black - Square Pots (Jumbo)	$1.20
724140	5" x 5" x 6.5" Black - Square Pots (Jumbo Senior)	$1.20
724160	6" x 6" x 7" Black - Square Pots (Magnum)	$1.45

WHITE SQUARE PLASTIC POTS

These new European pots are a great addition to the Botanicare™ line. Three sizes are available: 6" x 6" (3.4 liter), 7" x 7" (6 liter) and 8.5" x 8.5" (10 liter). The pots are white and are of excellent quality.

Item No.	Description	MSRP
724560	6" x 6" White Square Pot - Small	$1.50
724565	7" x 7" White Square Pot - Med	$2.50
724570	8.5" x 8.5" White Square Pot - Large	$4.25

MESH POTS/BUCKET LIDS

These heavy duty 6", 8" & 10" plastic pots are designed specifically to snugly fit on a standard 5 gallon bucket. They are mesh on the sides and bottom for maximum aeration. They work great in all hydroponic applications. Much better quality than competitive bucket lids.

Item No.	Description	MSRP
724529	6" Mesh Pot/Bucket Lid	$4.58
724530	8" Mesh Pot/Bucket Lid	$4.58
724535	10" Mesh Pot/Bucket Lid	$5.10

SQUARE MESH POT

This large mesh pot is perfect to hold plants in ebb and flow tables. The large base keeps the plant upright. The mesh on the sides and bottom allow for maximum aeration to the roots.

Item No.	Description	MSRP
724438	Square Mesh Pot 9" x 9" x 5¼"	$1.49

ROUND PLASTIC MESH BOTTOM POTS

- Excellent multipurpose pots.
- Hard black plastic.
- Works well for all indoor or outdoor applications.

PREMIUM SQUARE BLACK PLASTIC POTS

- Durable, thick black plastic.
- Injection molded.
- Heavy duty design.
- Grip lip for easy handling.
- Stand off feet for better drainage.

Item No.	Description	MSRP
724645	Premium 6" x 6" x 8" Pot	$1.49
724650	Premium 7" x 7" x 9" Pot	$2.49
724655	Premium 9" x 9" x 10.5" Pot	$4.29
724660	Premium 8" x 8" x 7.5" Pot	$3.69

PERFECT POT - 2 GALLON

The Perfect Pot is durable and flexible, designed for use with large plants, for soil and hydro growers alike. This pot will allow growers to pack a maximum number of plants per tray, without over-crowding, leaving enough room to grow large, bushy plants with lush root systems.

Item No.	Description	MSRP
724525	Perfect Pot - 8.5" x 8.5" x 7.5"	$5.00

3 GALLON & 5 GALLON BLACK PLASTIC BUCKETS & LIDS

These premium quality, black plastic buckets can be used for a variety of gardening applications. Many growers use these as containers to grow their plants in. You can even place the 3.2 gallon bucket inside the 5 gallon bucket to build your own hydroponic growing system.

Item No.	Description	lbs	MSRP
724379	3 Gallon Bucket	1.2	$6.49
724380	5 Gallon Bucket	2.0	$7.59
724381	Bucket Lid	1	$2.69

PREMIUM ROUND PLASTIC MESH BOTTOM POTS

- Durable, thick black plastic.
- Heavy duty design.
- Hole pattern offers excellent drainage.
- Injection molded.

Item No.	Description	MSRP
724625	Premium 6" Black Plastic Mesh Pot	$1.45
724630	Premium 8" Black Plastic Mesh Pot	$2.70
724635	Premium 10" Black Plastic Mesh Pot	$3.20
724640	Premium 12" Black Plastic Mesh Pot	$5.50

AERO BUCKET LID WITH MESH BOTTOM

Fits on the top of a standard 5 gallon bucket.

Item No.	Description	MSRP
724110	10" Aero Bucket Lid	$5.50

Item No.	Description	MSRP
724100	6" Black Plastic - Mesh Bottom	$1.45
724105	8" Black Plastic - Mesh Bottom	$2.70
724115	10" Black Plastic - Mesh Bottom	$3.20
724120	12" Black Plastic - Mesh Bottom	$5.50

FLOW-N-GROW™ BUCKET SYSTEM

Item No.	Description	MSRP
707635	Flow-n-Grow™ Blue Bucket - 4 gallon	$6.59
707640	Flow-n-Grow™ Black Mesh Insert	$6.59
707645	Flow-n-Grow™ Clear Vented Lid	$8.29

The Flow-n-Grow™ bucket, mesh insert and clear vented cover are ideal for the do-it-yourself gardener. Because you can purchase the components a la carte, you can customize the size of growing system for your space and the specific number of plants you want to grow. You can easily expand your garden by adding additional modules at any time. This system can be used by a beginning hobbyist or expanded for larger commercial applications. All of these components are made from premium quality materials to provide you years of service.

The Flow-n-Grow™ bucket features food grade plastic, safe for you and your plants. At 4 gallons, it has plenty of space to grow your favorite plants. It comes with a ¾" grommet pre-installed for your convenience. Its unique space saving design makes it easy to fit into any room or system.

- Dimensions: 9.5" W x 9.5" L x 13.5" D.
- Attractive, food grade, blue plastic grow buckets.
- Holds 3 gallons of grow media (with black mesh insert).
- Comes pre-plumbed with ¾" fitting & grommet.

This black mesh insert fits snugly in the Flow-n-Gro™ bucket to create an easy to use grow container for all of your plants. The rigid plastic insert keeps its shape through years of use. The spacing between your Flow-n-Gro™ bucket and black mesh insert allows the optimum air and water flow for your plants root system to flourish!

- Dimensions: 9.5" W x 9.5" L x 10" D.
- Full mesh sides and bottom allow complete media saturation.
- For use with Flow-n-Grow™ Buckets.
- Snaps in to avoid ' floating' due to in-coming water flown

The innovative Flow-n-Grow™ clear vented cover allows you to maintain the perfect humidity level for your sensitive plant starts. By adjusting the ventilation slots on the top of the cover, you can dial in your garden for optimum growth. The clear top allows plenty of light to reach your plants and help them reach their highest potential.

- Dimensions: 8.25" W x 8.25" L x 10.5" D.
- Increased ventilation and humidity for young plants.
- For use with Flow-n-Grow™ buckets.
- Fits securely onto Flow-n-Grow™ bucket.

NET POTS

Excellent quality net pots are thicker and more heavy-duty than most on the market. They offer a wider rim for better support. Smaller mesh allows the grower to use virtually all types of grow media.

Item No.	Description	MSRP
724500	2" Net Pots	.20¢/ea
724505	3" Net Pots	.42¢/ea
724510	3.75" Net Pots	.56¢/ea
724515	5" Net Pots	$1.12/ea
724520	6" Net Pots	$1.28/ea

HEAVY DUTY NET POTS

- Super heavy duty, designed to be re-used.
- Wider hole spacing for better root aeration.
- Made with recycled plastic in Humboldt County.

Item No.	Description	MSRP
724429	3" Heavy Duty Net Pot	$1.00
724430	5.5" Heavy Duty Net Pot	$1.75
724435	8" Heavy Duty Net Pot	$3.59

NET CUPS

Slightly thinner than the above pots, also features large mesh - ideal for use with Hydroton. These come pre-bagged.

Item No.	Description	MSRP
724365	2" Net Cups - (Black GH)	.29¢/ea
724370	3" Net Cups - (Brown GH)	.54¢/ea
724375	6" Net Cups - (Brown GH)	$1.94/ea

NET POT LIDS

These durable white lids are designed specifically to fit net pots.

Item No.	Description	Lids/Bag	MSRP
724600	2" Net Pot Lids	10	.42¢/ea
724605	3" Net Pot Lids	10	.62¢/ea
724610	3.75" Net Pot Lids	10	.78¢/ea
724615	5" Net Pot Lids	10	$1.44/ea
724620	6" Net Pot Lids	10	$1.80/ea

ROOT GUARD LIDS

Protect plant roots from debris, heat and light and reduce algae growth on media. Fit on top of net pots and around base of plant.

Item No.	Description	MSRP
724315	2" Root Guard	.37¢
724325	3" Root Guard	.58¢
724335	3.75" Root Guard	.75¢
724345	5" Root Guard	$1.45
724355	6" Root Guard	$1.80

NEOPRENE INSERTS

Black foam inserts that act as root guards.

Item No.	Description	MSRP
724299	1.5" Neoprene Insert (For Botanicare® Powercloners)	.53¢
724300	2" Neoprene Insert	.55¢
724305	3" Neoprene Insert	.95¢
724310	3.75" Neoprene Insert	$1.40

COCOTEK® BASKET LINERS

CocoTek® products have become an instant hit! They are 100% organic and environmentally friendly (product will break down in 3 years), yet very durable because fibers are woven not shredded like compressed coco bricks.

Item No.	Description	MSRP
714025	3″ CocoTek® Liner	.64¢/ea
714040	6″ CocoTek® Liner	.99¢/ea
714045	8″ CocoTek® Liner	$2.35/ea

BAMBOO STAKES

Bamboo stakes are all natural, strong & very durable. They can be reused repeatedly for several growing seasons. With sizes of 3', 4', 6' & 8', these can support plants of all sizes.

Item No.	Description	Bag Qty	MSRP
800991	3′ Bamboo Stakes	25	$2.99/bag
800993	4′ Bamboo Stakes	25	$3.49/bag
800996	6′ Bamboo Stakes (1/2" Diameter)	25	$15.49/bag
800998	8′ Bamboo Stakes (3/4" Diameter)	25	$27.49/bag

FLYING SAUCERS

Grotek™ Flying Saucers are a complete line of durable, high volume vinyl polymer saucers. They have been designed to support maximum weights of your potted plants and allow for better drainage.

Item No.	Description	MSRP
724440	Saucers Clear Plastic 4″	.37¢/ea
724445	Saucers Clear Plastic 6″	.49¢/ea
724450	Saucers Clear Plastic 8″	.89¢/ea
724455	Saucers Clear Plastic 12″	$1.99/ea

CLEAR PREMIUM PLASTIC SAUCERS

Item No.	Description	Nursery Pot	MSRP
724665	6" Clear Premium Saucer	1 Gallon	.44¢/ea
724670	8" Clear Premium Saucer	2 Gallon	.74¢/ea
724675	10" Clear Premium Saucer	3, 5 Gallon	$1.18/ea
724680	12" Clear Premium Saucer	—	$1.79/ea
724685	14" Clear Premium Saucer	7 Gallon	$1.99/ea
724690	16" Clear Premium Saucer	10, 15 Gallon	$3.09/ea
724695	18" Clear Premium Saucer	20 Gallon	$3.99/ea

GREEN PREMIUM PLASTIC SAUCERS

- Durable, hard plastic.
- Washable and reusable.
- Sizes to accommodate most pots.
- Made in the USA.

Item No.	Description	MSRP
724900	6" Green Premium Plastic Saucer	.60¢
724905	8" Green Premium Plastic Saucer	.90¢
724910	10" Green Premium Plastic Saucer	$1.37
724915	12" Green Premium Plastic Saucer	$1.63
724920	14" Green Premium Plastic Saucer	$2.49
724925	16" Green Premium Plastic Saucer	$2.99

GROW BAGS

NEW! SIZES

Item No.	Description	Pkg Qty	MSRP
724400	1 Gallon size	25	.18¢/ea
724402	2 Gallon size	25	.26¢/ea
724405	3 Gallon size	25	.30¢/ea
724410	5 Gallon size	25	.42¢/ea
724412	7 Gallon size NEW!	25	.48¢/ea
724415	10 Gallon size NEW!	25	.66¢/ea
724418	20 Gallon size NEW!	25	$1.16/ea
724420	30 Gallon size NEW!	25	$1.78/ea

Pre-packaged in quantities of 25 grow bags for easy handling. Durable & excellent quality bags. Holes in the bottom allow proper drainage.

BOTANICARE® 30 GALLON CAMO GROW BAG

Grow media not included

- Sturdy 6 mil plastic.
- Digital camo print.
- Pre-punched drainage holes.
- Fill with preferred media.
- Plant right in the bag.

Item No.	Description	MSRP
740072	30 Gallon Camo Grow Bag	$5.75

NO STRESS GUIDE TO INDOOR HYDROPONICS DVD

Item No.	Description	MSRP
800977	No Stress Guide to Indoor Hydroponics DVD	$24.95

Sit back, relax and come with us to explore the world of indoor hydroponics gardening. This educational, yet fun film will give you the best insight on how to set up and maintain an indoor hydro garden for years to come. For mature audiences. 72 minutes long.

Features:
- Lighting
- CO2
- Atmospheric/Control
- Nutrients
- Cloning
- Super Cropping
- Hydroponic Systems
- Growing Substrates
- Ventilation
- Odor Control
- Pest Control

HYDROPONICS EXPLAINED DVD

Item No.	Description	MSRP
800976	Hydroponics Explained DVD	$29.95

The complete hydroponic growing guide for fresh healthy herbs, vegetables and flowers. This forty minute DVD will take you step by step towards setting up your own system and producing successful crops time after time. Grow real produce with unmatched flavor and nutrition. Whether you are a first time hobbyist, commercial grower, or even considering hydroponics as a new career, then this video will give you a total overview and understanding of just how hydroponic systems actually work.

CLASSROOM HYDROPONIC PLANT FACTORY

Item No.	Description	MSRP
800941	Classroom Hydro Plant Factory	$19.95

This comprehensive book uses hands-on growing experience to introduce hydroponics to students. The lessons are designed separately for elementary, middle, and high school levels, and are supplemented with blackline masters and student worksheets. Hydroponic plants grown throughout the school year provide opportunities for the exploration and discovery of plant anatomy and physiology. Packet includes instructions on how to build hydroponic wick systems and a light stand. 30 worksheets and transparencies.

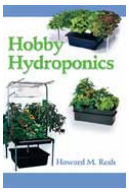
HOW TO SUPERCHARGE YOUR GARDEN - Millennium Edition

Item No.	Description	MSRP
800950	How to Supercharge Your Garden	$33.95

Understand how your garden should work, so you can MAXIMIZE production and INCREASE quality! This book will teach you SOILLESS GARDENING from start to finish by quick and simply reference on: • how plants work in detail • how each plant hormone affects growth • easy cutting and rooting methods • various soilless growing techniques (including aeroponics) • well-kept trade secrets on growing
Through charts, graphs, tables and diagrams, "How to Supercharge Your Garden" explains exactly what your plants need so you can control their growth at every stage. It also contains industry tips on achieving the healthiest and the most productive crops possible. There is a lot of technical information that has been made very easy to follow and understand, which makes this informative text of great value to growers of all levels.

HOBBY HYDROPONICS by Howard M. Resh

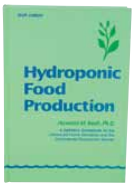
Item No.	Description	MSRP
800955	Hobby Hydroponics	$15.95



"Hobby Hydroponics" is an overview and evaluation of various indoor commercially available hydroponic units. This book informs the reader of the growing aspects of hydroponics at the home level. This includes some of the cultural practices to care for your plants indoors and how to provide them with adequate light, temperatures, etc. to obtain productive plants. The book also describes the types of crops specific hydroponic hobby units are best suited for. Soft cover 161 - pages.

HYDROPONIC FOOD PRODUCTION by Howard M. Resh

Item No.	Description	MSRP
800957	Hydroponic Food Production	$59.95

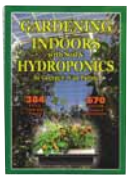


Hydroponic Food Production The most concise textbook on hydroponic food production available. A complete manual and an encyclopedic reference work on soilless food production. Technically comprehensive with nearly 400 photographs and detailed drawings on every form of hydroponics for temperate, tropical, or cold climates.

A state-of-the-art workbook widely used by advanced home gardeners and by professional hydroponic growers. Well organized with impeccable academic and professional credentials.

GARDENING INDOORS WITH SOIL & HYDROPONICS by George F. Van Patten

Item No.	Description	MSRP
800978	Gardening Indoors with Soil & Hydroponics	$24.95



This Fifth Edition of Gardening Indoors with Soil & Hydroponics, a Best Seller since 1986, is expanded and completely rewritten with all new information. More than 670 full color photos, drawings, charts and graphs illustrate every detail of this authoritative easy-to-understand book. This book is very user-friendly, easy to read. Numerous simple cultivation solutions make it appealing to novice gardeners. Seasoned gardeners are also able to find answers to all their questions. Discover how to achieve the biggest best yields even with limited space and a small budget. The former title, Gardening Indoors: the Indoor Gardener's Bible, changed to Gardening Indoors Growing with Soil & Hydroponics. Soft cover – 374 pages.

HOW-TO HYDROPONICS, 4th Edition

Item No.	Description	MSRP
800940	How to Hydroponics 4th Edition	$24.95

Learn the best kept secrets of building and gardening with high-yield aeroponic and hydroponic systems you can build. Hydroponic gardening is the most productive way to grow all varieties of plants, and those raised in a hydroponic system will exhibit maximum yield, flavor, vitamin and essential oil content. How-To Hydroponics illustrates each step of the hydroponic growing process with clear photographs and diagrams and includes step-by-step hydroponics system plans to build eight types of hydroponic and aeroponics systems.

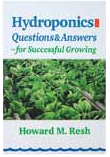
HYDROPONIC HOME FOOD GARDENS by Howard M. Resh

Item No.	Description	MSRP
800960	Hydroponic Home Food Gardens	$14.95

Howard Resh's best-selling guidebook for home hydroponic gardeners. This book will help you to produce your own pesticide-free, clean, nutritious vegetables and fruits. You will not have to worry about problems of infertile or infested soil, weeds and pests. Produce up to 20 - 25% greater yields using hydroponic methods.

Scores of photographs, drawings and diagrams make it easy to have a variety of gardens; simple hydroponic window or deck trays or containers, or full-scale, productive hydroponic gardens or home greenhouse projects. Soft cover - 159 pages.

HYDROPONIC QUESTIONS & ANSWERS by Howard M. Resh



Item No.	Description	MSRP
800962	Hydroponic Questions & Answers	$15.95

The purpose of this book is to review many questions associated with hydroponic culture and to offer useful suggestions. The questions related to hydroponic systems, plant varieties, plant nutrition, plant culture, plant disease and pest management, environmental factors, optimum ranges, production and marketing. Recommendations come from experiences over the past twenty years of hydroponic growing. Includes such topics as: nutrition, essential elements, greenhouse site, water, physiological disorders, disease, environmental conditions, harvesting, storing, sterilization and much more. Soft cover - 200 pages.

BEGINNING HYDROPONICS SOILLESS GARDENING

Item No.	Description	MSRP
800970	Beginning Hydroponics Soilless Gardening	$9.95

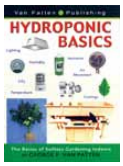
Hydroponics, a method of gardening without soil, has developed over the past fifty years. While it has been proven both reliable and effective, and has received much attention in some quarters, it is still an unfamiliar practice to many gardeners. This book is designed to introduce you to the principles and methods of hydroponic gardening.

HYDROPONIC TOMATOES by Howard M. Resh

Item No.	Description	MSRP
800965	Hydroponic Tomatoes	$14.95

Home-grown tomatoes can be large, red-ripe, deliciously aromatic and full of flavor. No previous experience necessary. This book makes growing fantastic hydroponic tomatoes much easier. Presented with easy-to-use terms and procedures. A fine manual for producing home-grown tomatoes hydroponically, with automated procedures that minimize work, problems of weather, plant disease and pests so you can enjoy a bountiful, flavorful crop. Many illustrations help to show you the way. Soft cover - 142 pages.

HYDROPONIC BASICS – THE BASICS OF SOILLESS GARDENING INDOORS



Item No.	Description	MSRP
800980	Hydroponic Basics - The Basics of Soilless Gardening Indoors	$5.49

This simple, little book is packed with information on hydroponic gardening. The graphic color, layout, and design helps guide a hydroponic gardener through basic plant science and environment to purchasing a garden and appropriate supplies. Plans for making your own hydroponic garden, nutrient deficiencies, plant problems, and growing a garden, beginning to end, are all included in this invaluable guide. Soft cover – 80 pages.

GARDENING INDOORS WITH HID LIGHTS by George F. Van Patten

Item No.	Description	MSRP
800984	Gardening Indoors with HID Lights	$14.95

This "how-to" book unlocks the door to the world of gardening indoors under fluorescent and high intensity discharge (HID) lamps. Fluorescent lamps help seedlings and low-light plants start earlier and grow stronger. HID lamps are a substitute for the sun! High-tech HID lamps have been used in Europe for more than two decades with phenomenal results. Now available in the U.S., the HID lamps offer total control of the growing season all year round. Eat vine-ripened vegetables and enjoy fresh flowers daily regardless of the season. A high-tech gardening environment is very easy to create and maintain. Join the scores of other gardeners that are gardening all year round! Soft cover – 200 pages.

GARDENING INDOORS WITH CO2 by George F. Van Patten

Item No.	Description	MSRP
800986	Gardening Indoors with CO2	$14.95

Plants can use up to five times more CO2 than naturally occurs in the air. CO2, essential to photosynthesis, is often the most overlooked element limiting plant growth. This book demonstrates how fertilizing the air with CO2 can shorten growing time and double your harvest. Includes technical information on how to set up a CO2 emitter system or generator system and how to grow cuttings and seedlings with CO2. Packed with the most up-to-date facts and figures on CO2, Gardening Indoors With CO2 shows you how to put CO2 to work in your garden room or greenhouse for super results! Soft cover – 96 pages.

GARDENING INDOORS WITH CUTTINGS by George F. Van Patten

This book will show you how to perform common cuttings, plus grafting and more. Learn how to choose between the latest root hormones, grow a disease-free garden and achieve higher yields. In addition, learn how to control temperature, humidity, lighting and how to build a mist chamber. This book can give you the understanding and confidence to clone plants like a pro. All of the Gardening Indoors books are written with the beginner in mind and provide clear, easy to understand instructions and descriptions. Soft cover – 96 pages.

Item No.	Description	MSRP
800988	Gardening Indoors with Cuttings	$14.95

GARDENING INDOORS WITH ROCKWOOL by George F. Van Patten

This book is packed with all new and revised facts and figures on rock wool, the most popular hydroponic growing medium. It also has detailed instructions showing you how to control pH and electrical conductivity and how to set up a rock wool hydroponic garden. Coupled with a few simple techniques, rock wool can produce twice as much as soil. Soft cover – 128 pages.

Item No.	Description	MSRP
800990	Gardening Indoors with Rockwool	$14.95

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Soil / Soilless Feeding Schedule	Bio Root	BioThrive Grow	CaMg+	Bio Weed	BioThrive Bloom	Bio Bud
Week 1 Rooted cuttings *(18 Hour Photoperiod)*	5ml	5ml	5ml	2.5ml	~	~
Week 2 Veg	10ml	10ml	5ml	2.5ml	~	~
Week 3 Veg *(repeat for extra veg weeks and donor's)*	10ml	10ml	5ml	2.5ml	~	~
Week 4 Transition *(12 Hour Photoperiod)*	10ml	10ml	5ml	2.5ml	~	~
Week 5 Early Flower	10ml	~	5ml	~	10ml	2.5ml
Week 6 Early Flower	5ml	~	5ml	~	10ml	2.5ml
Week 7 Mid Flower	5ml	~	5ml	~	10ml	2.5ml
Week 8 Mid Flower	~	~	5ml	~	10ml	2.5ml
Week 9 Late Flower	~	~	5ml	~	10ml	2.5ml
Week 10 Late Flower *(repeat for extra flowering weeks)*	~	~	2.5ml	~	10ml	2.5ml
Week 11 Ripen/Rinse	~	~	~	~	~	~

- *Repeat week 10 in program for extended flowering.*
- *We recommend to increase app rates X2 for heavy feeding plants.*
- *Keep nutrient reservoir aerated. For optimum results don't use an air stone.*
- *Always use unchlorinated water.*

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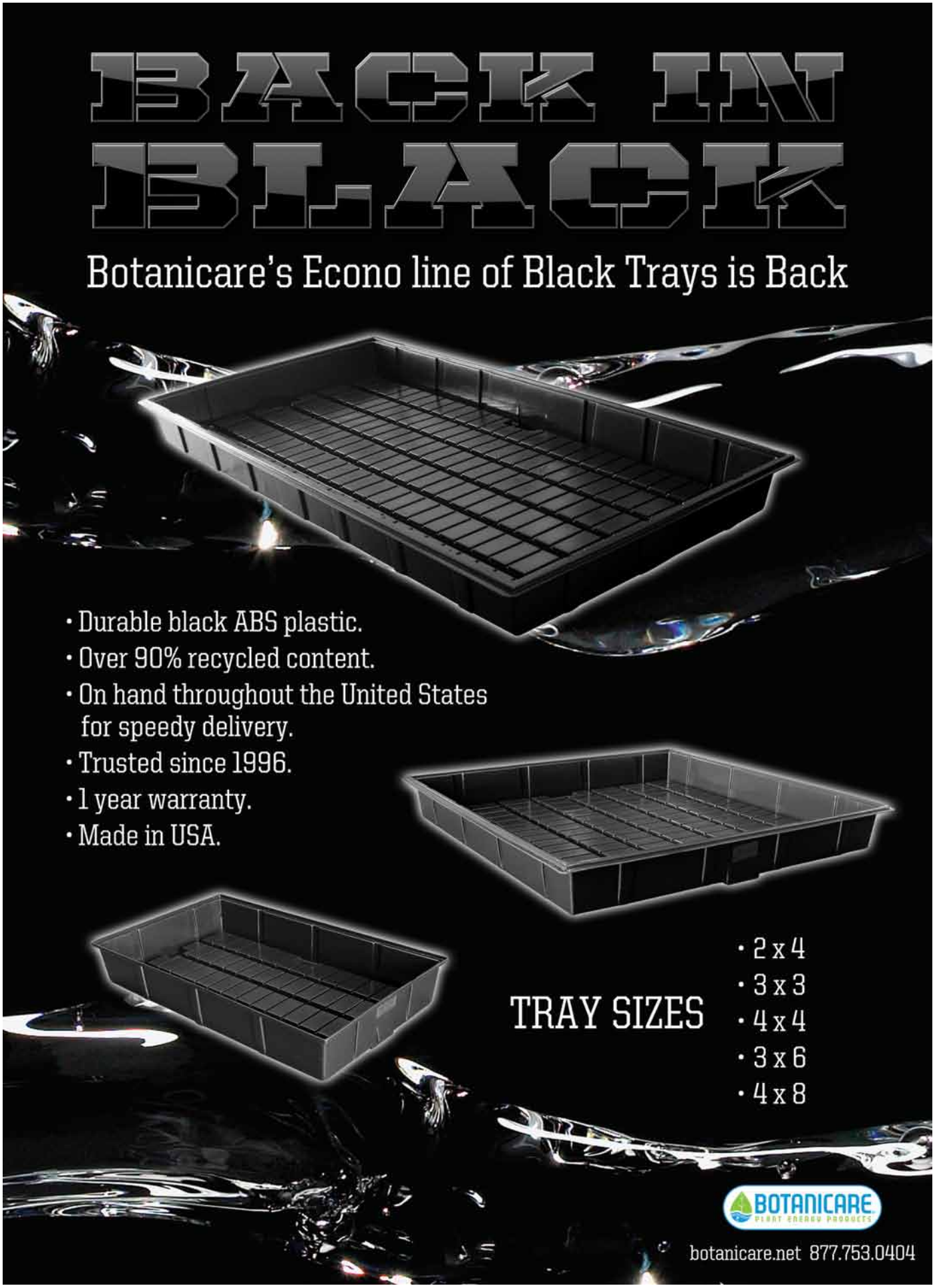
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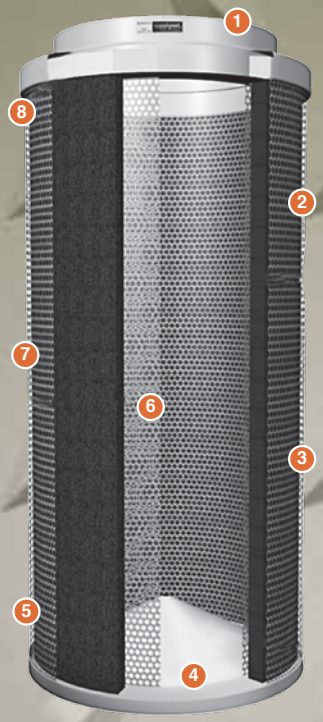

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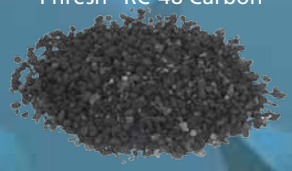
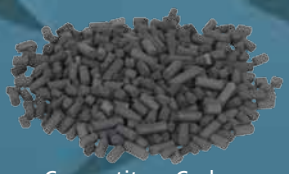
Phresh® RC-48 Carbon





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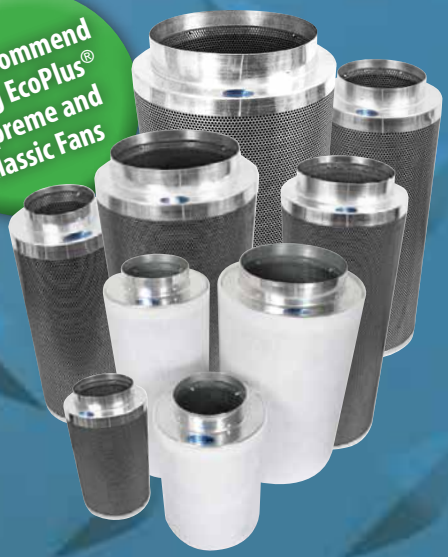

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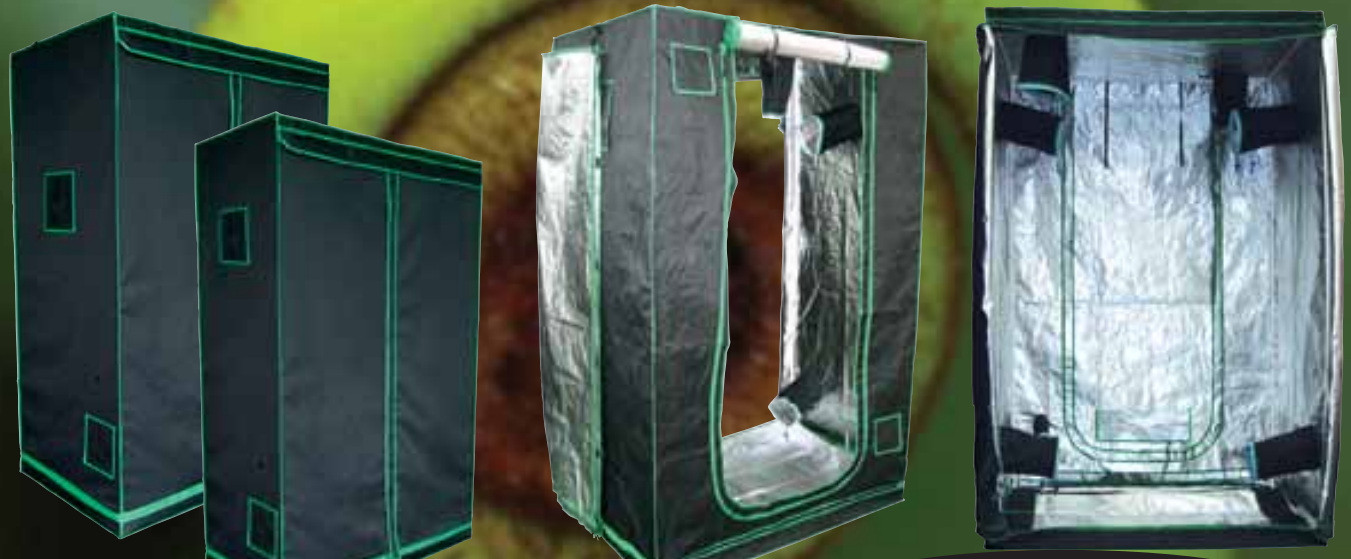

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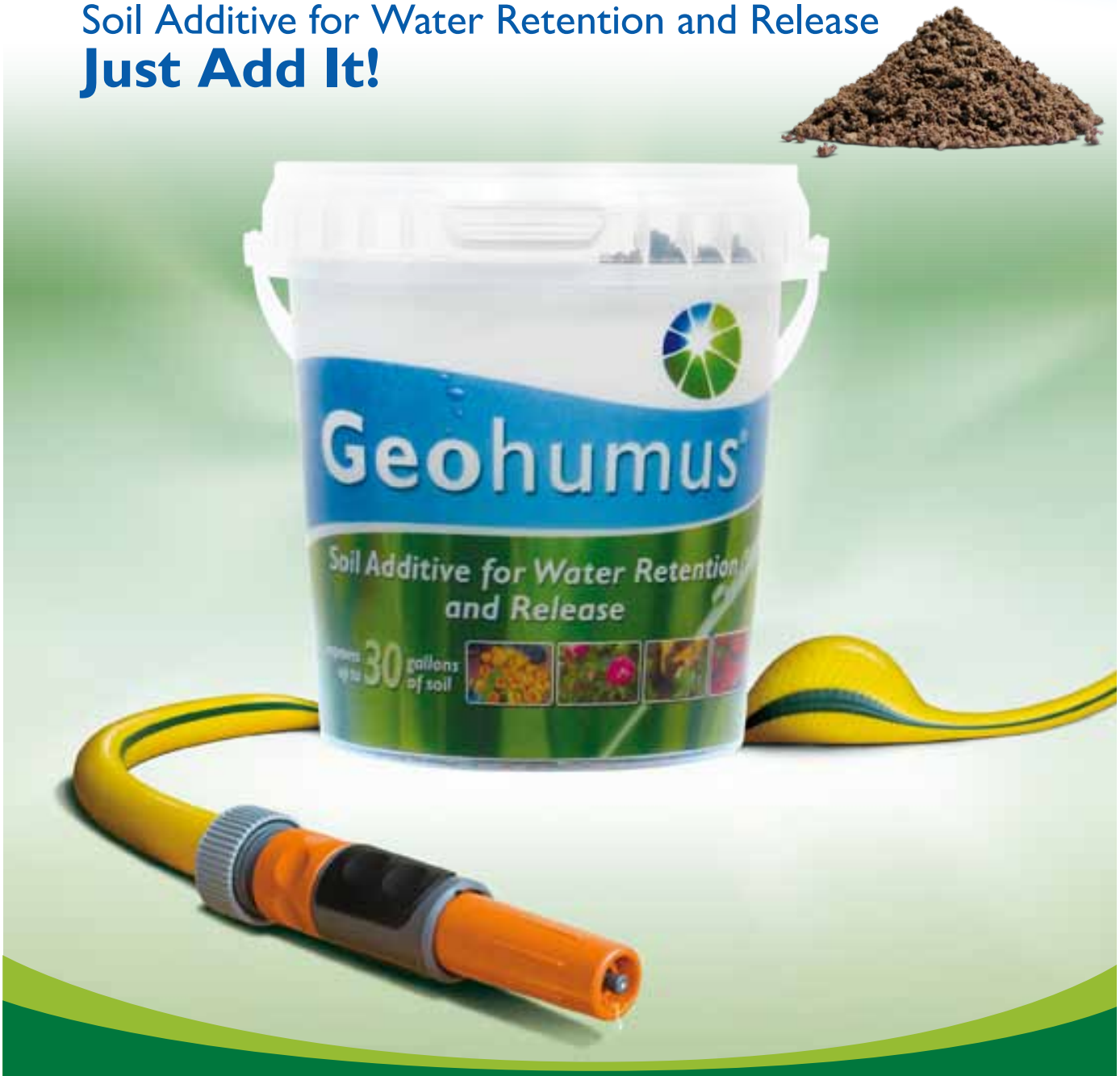

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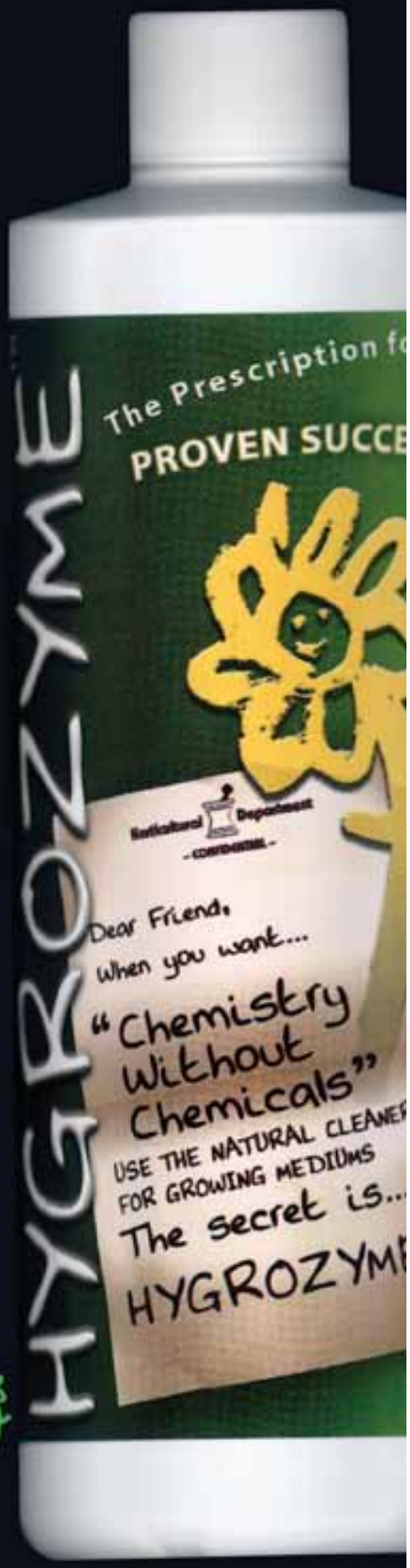

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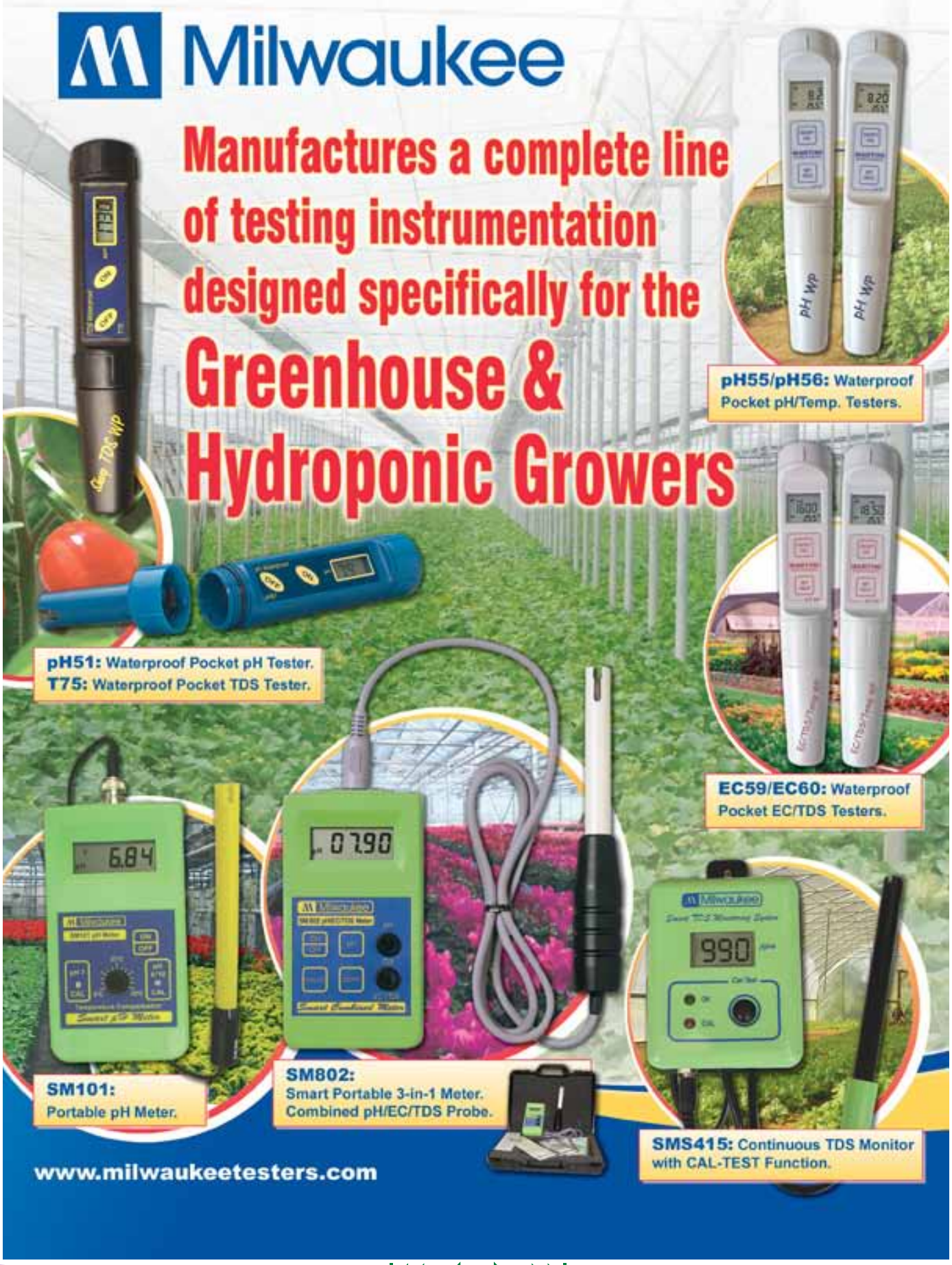
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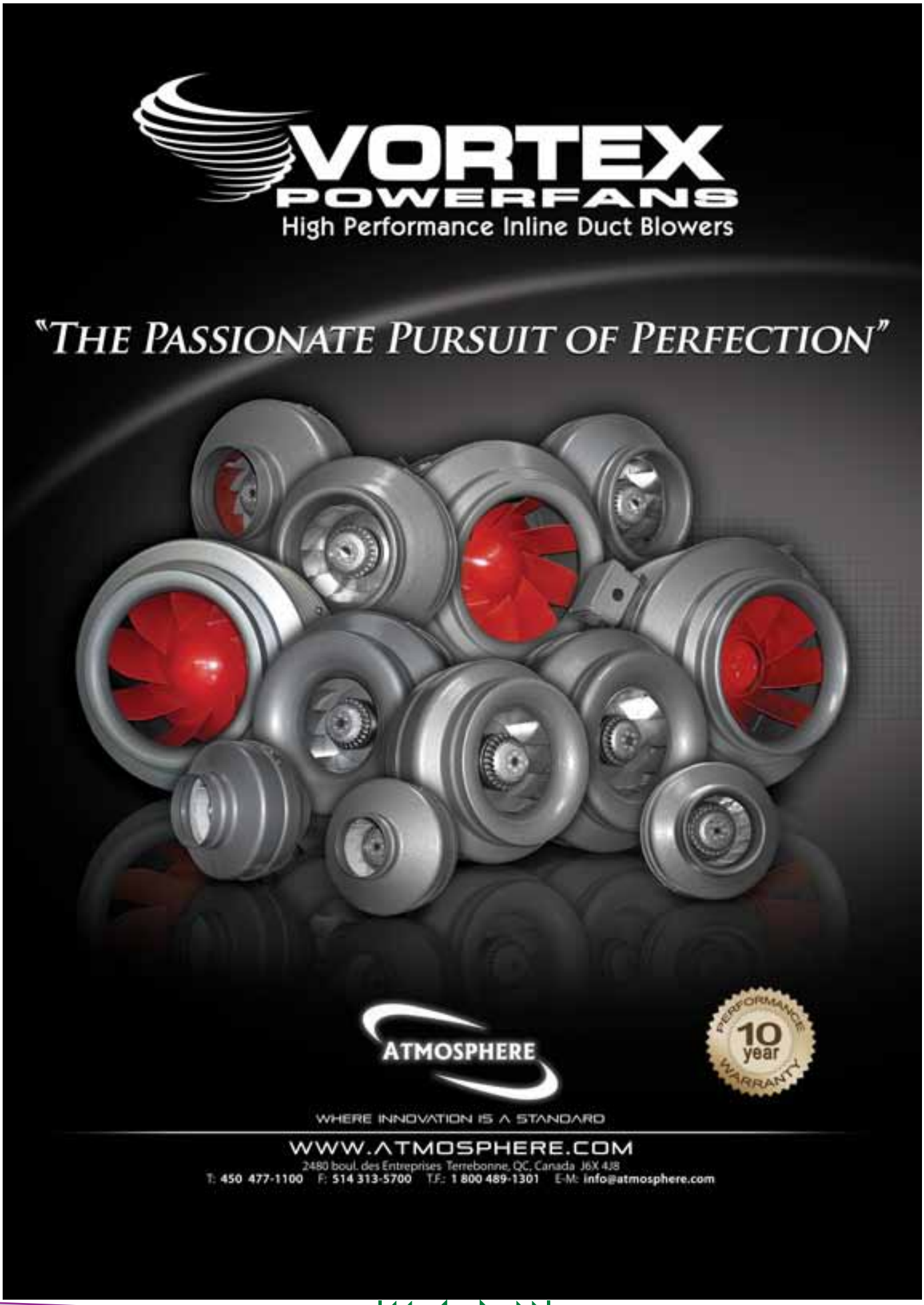
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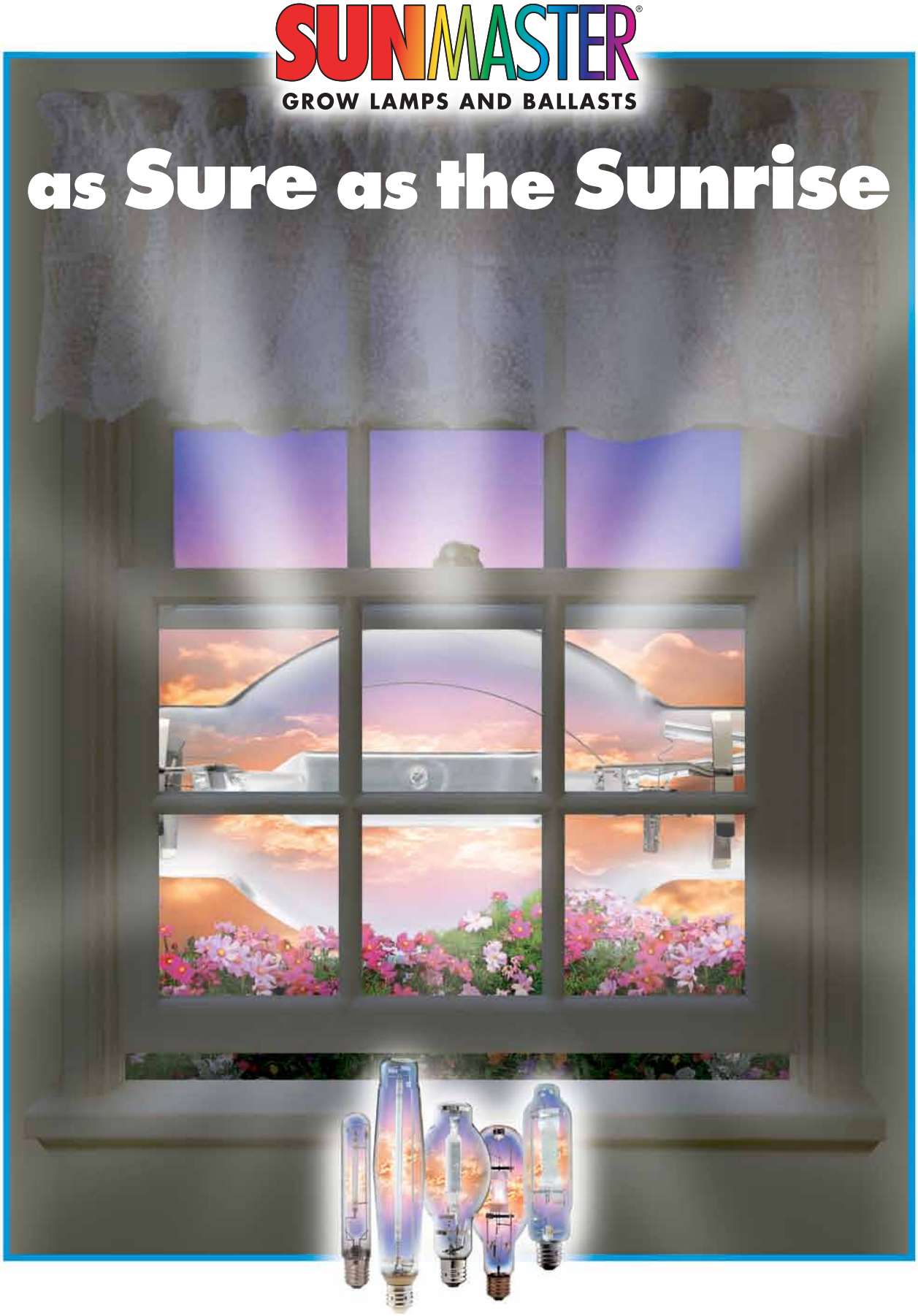

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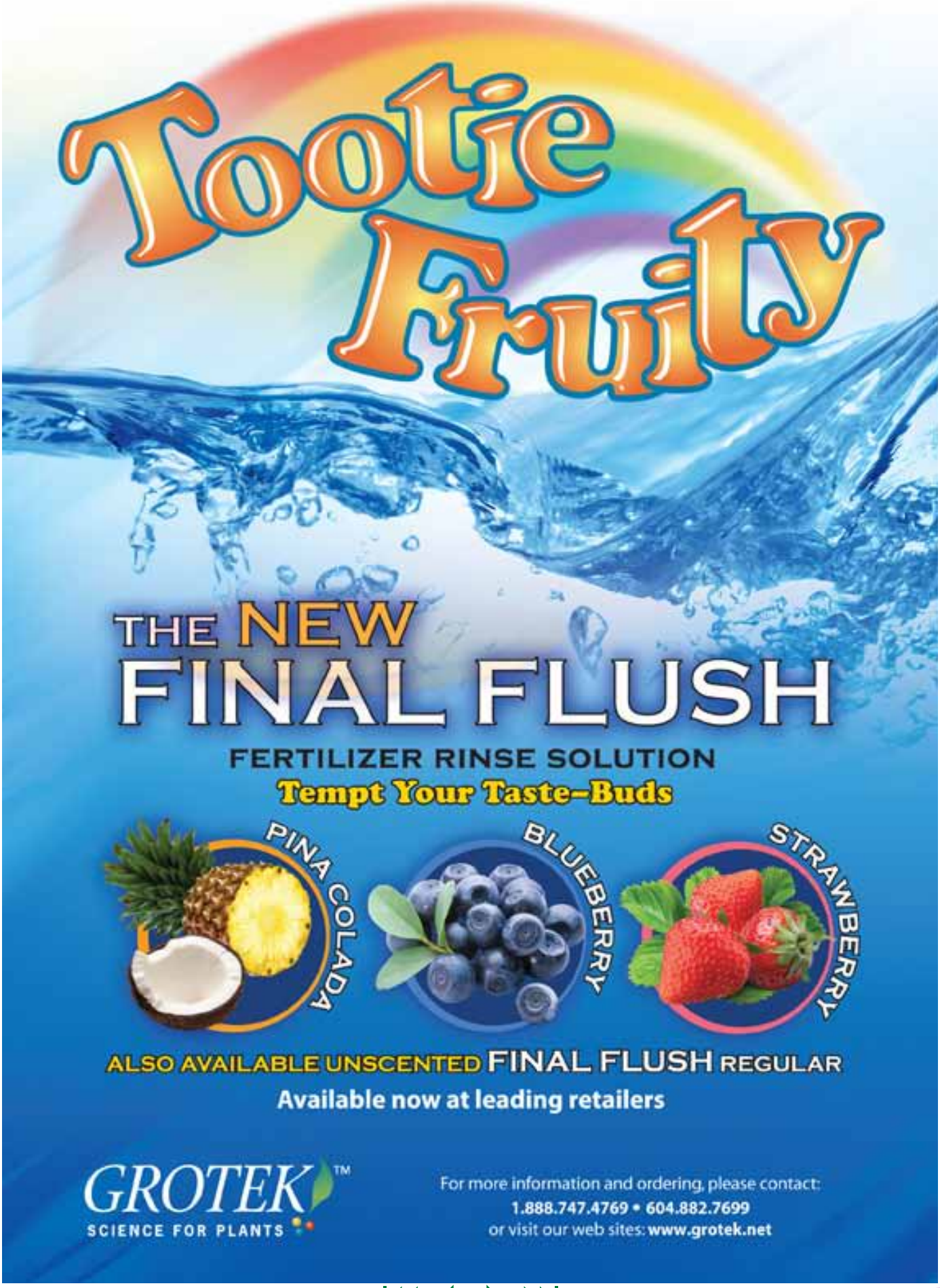
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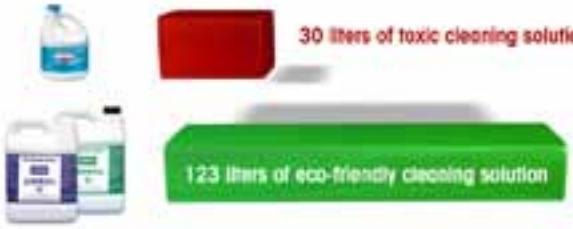

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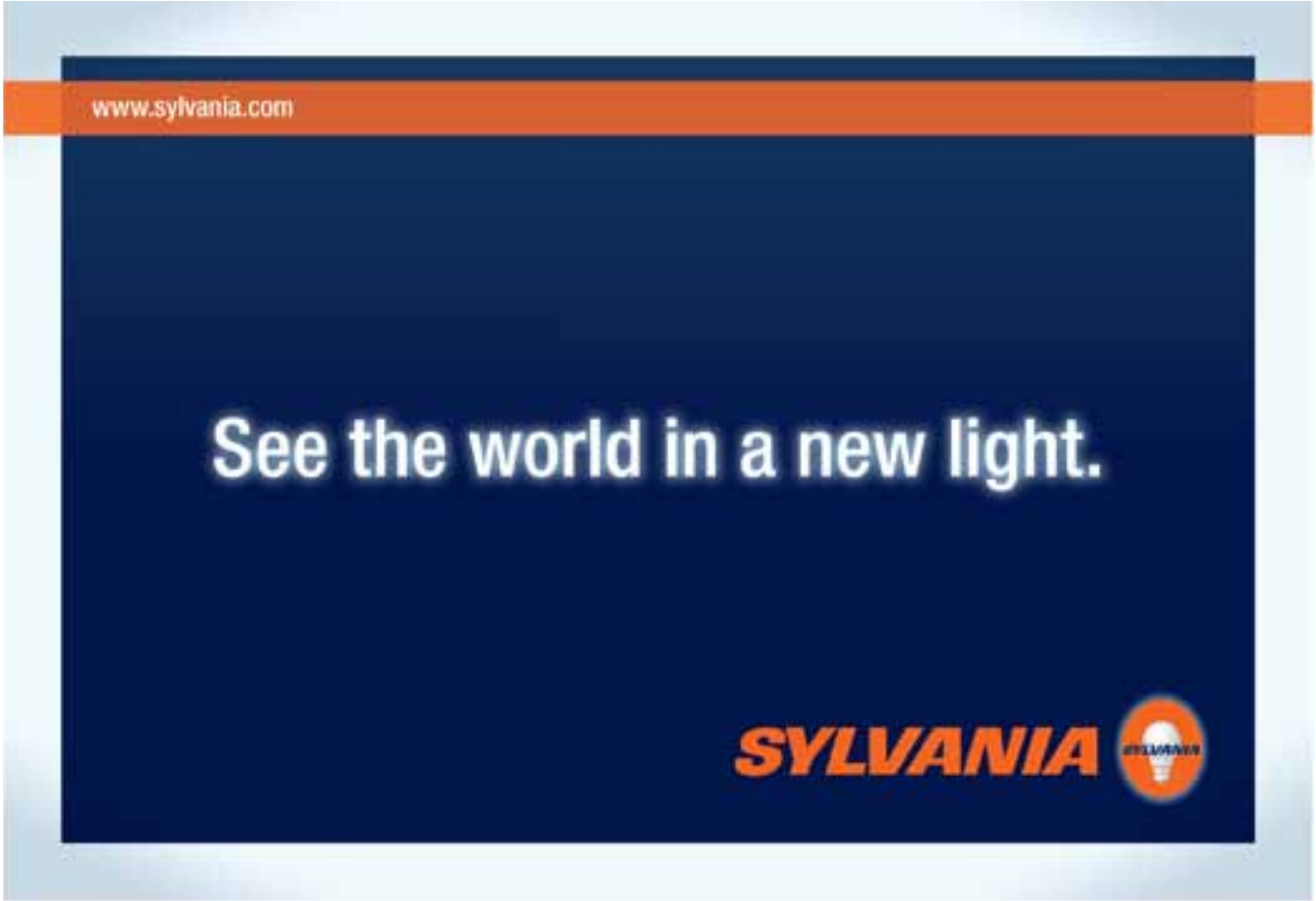
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NATURE'S NECTAR COMPONENTS	WEEK 1		WEEK 2		WEEK 3		WEEK 4		WEEK 5		WEEK 6		WEEK 7		WEEK 8	
WATER AMOUNT	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L
NATURE'S NECTAR NITROGEN 5-0-0	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML
NATURE'S NECTAR PHOSPHORUS 0-4-0	2.4 TSP	12 ML	2.4 TSP	12 ML	2.4 TSP	12 ML	2.4 TSP	12 ML	2.4 TSP	12 ML	—	—	—	—	2.4 TSP	12 ML
NATURE'S NECTAR POTASSIUM 0-0-5	2.4 TSP	12 ML	2.4 TSP	12 ML	2.4 TSP	12 ML	2.4 TSP	12 ML	2.4 TSP	12 ML	2.4 TSP	12 ML	2.4 TSP	12 ML	2.4 TSP	12 ML
ORGANA COMPONENTS	**WEEK 1**		**WEEK 2**		**WEEK 3**		**WEEK 4**		**WEEK 5**		**WEEK 6**		**WEEK 7**		**WEEK 8**	
WATER AMOUNT	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L	1 GAL	4 L
ORGANA ADD 2-0-0 (APPLIED AS A SPRAY)	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML	1.6 TSP	8 ML
ORGANA GUANO 0-4-0	—	—	—	—	—	—	—	—	—	—	2.4 TSP	12 ML	2.4 TSP	12 ML	—	—

NATURE'S NECTAR/ORGANA GARDENING TIPS FOR HYDROPONICS

- Please do not adjust pH. Greenhouse trials have proven that this step is not necessary.
- Clean all equipment between grow cycles.
- To keep reservoir looking like mineral based nutrients please add a 100 micron filter (this is not mandatory for performance).
- Change reservoir weekly.
- Nature's Nectar and Organa natural organics will not register on a PPM/EC pen (no pen required).
- DO NOT inject air into reservoir (i.e. air stones, air pumps, etc.).

MIXING INSTRUCTIONS: SOIL

Same as above with no special procedures for soil growing.

5 GALLON RECIPE

Nitrogen = 2.7 Tablespoons
Phosphorus = 4 Tablespoons
Potassium = 4 Tablespoons
ADD = 2.7 Tablespoons
Guano = 4 Tablespoons

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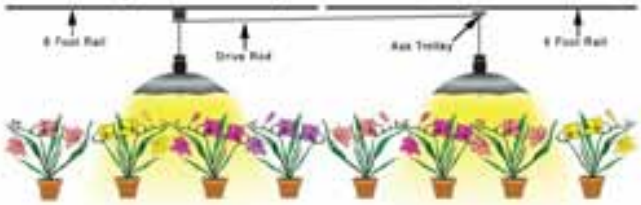

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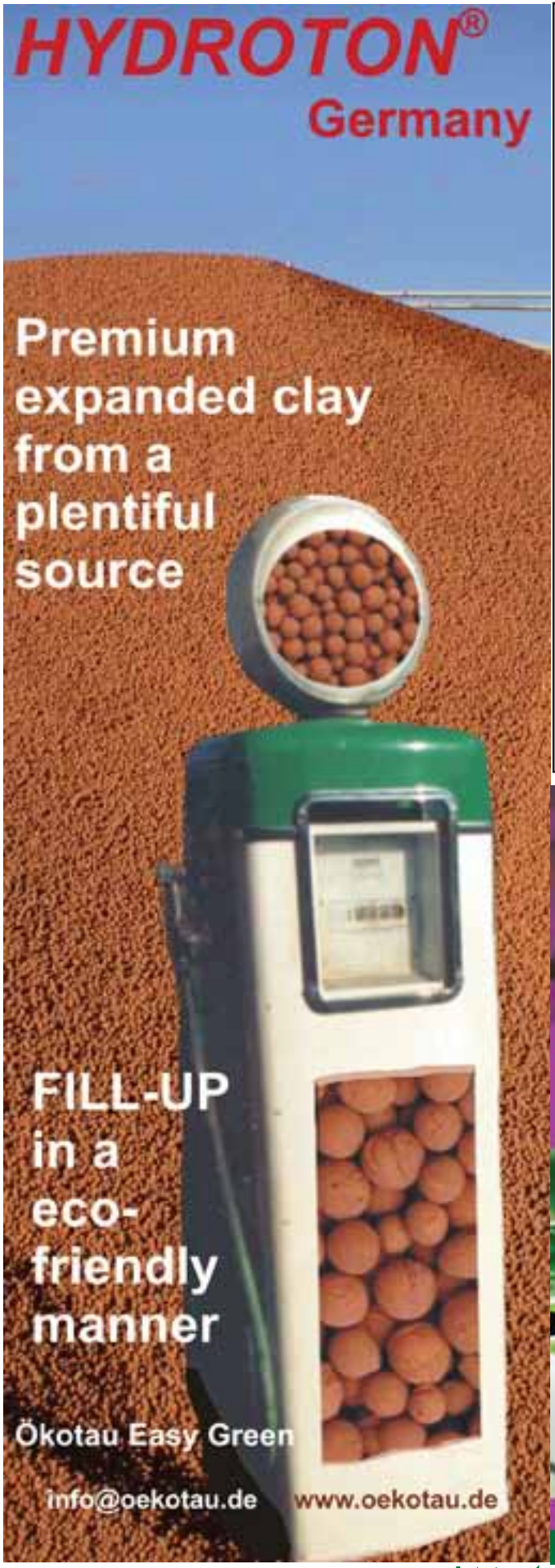
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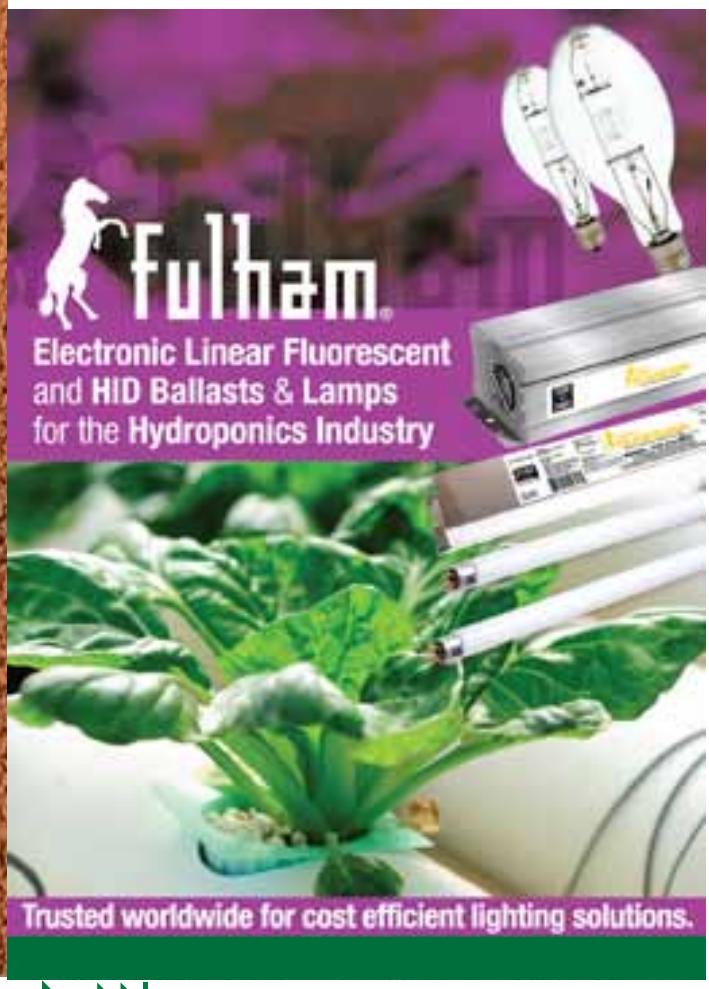
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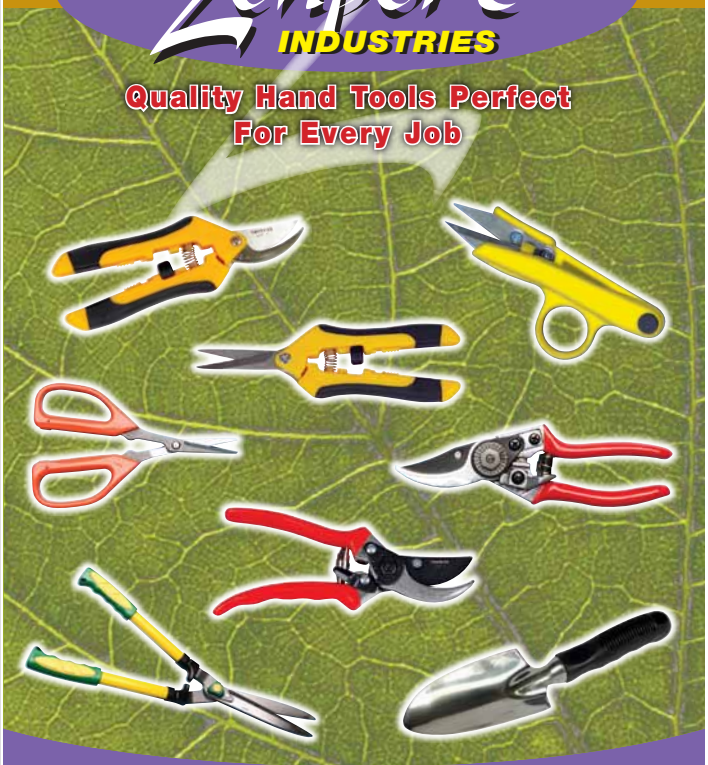

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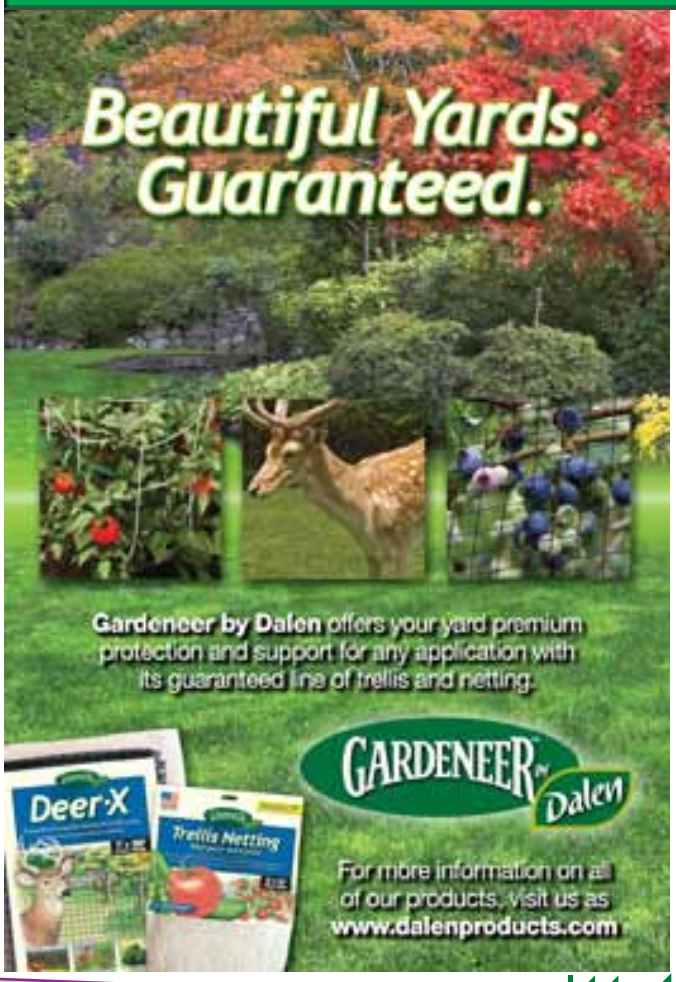

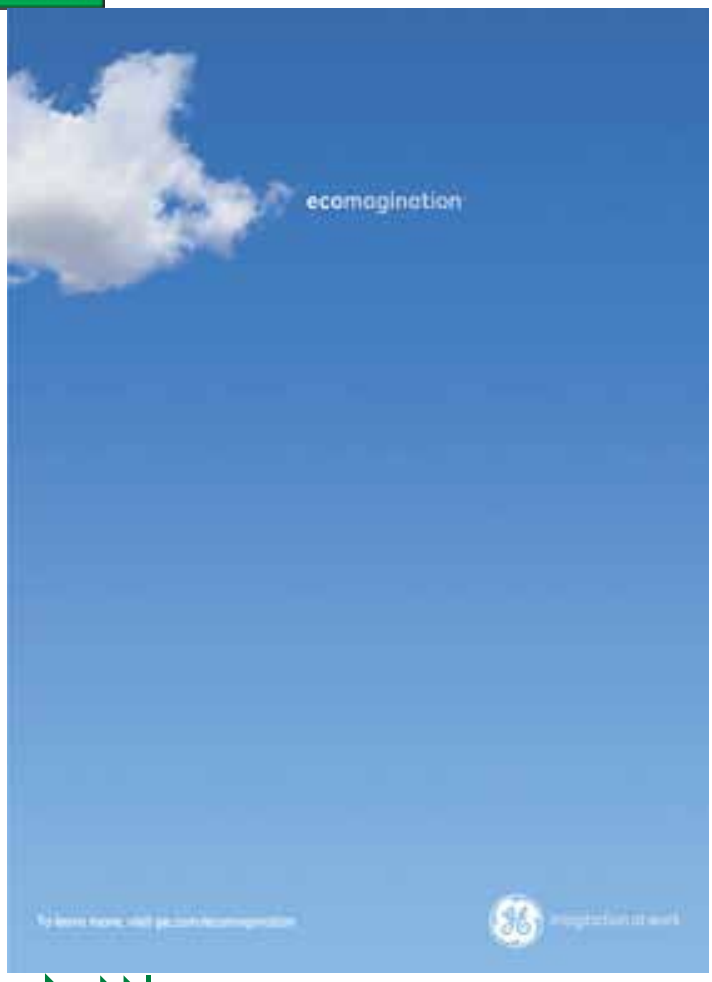

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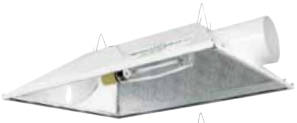

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